

Kylie R. Richardson

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# Case and Aspect in Slavic

винительный падеж  
grammatical aspect  
structural case instrumental  
совершенный и несовершенный вид  
accusative lexical case  
творительный падеж event structure

## Case and Aspect in Slavic

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*For Ben*

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KYLIE RICHARDSON

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# *Abbreviations*

|         |                                      |
|---------|--------------------------------------|
| 2ary    | secondary                            |
| ACC     | accusative case                      |
| AGR     | agreement morphology                 |
| AP      | adjectival phrase                    |
| APPL    | applicative                          |
| ApplicP | applicative phrase                   |
| ASP     | aspect                               |
| AspP    | aspect phrase                        |
| AUX     | auxiliary verb                       |
| BCS     | Bosnian/Croatian/Serbian             |
| CL      | clitic                               |
| DAT     | dative case                          |
| DO      | direct object                        |
| DP      | determiner phrase                    |
| EPP     | extended projection principle        |
| ESL     | East Slavic languages                |
| Fem     | feminine                             |
| FP      | functional projection                |
| F       | level within a functional projection |
| GEN     | genitive case                        |
| GN      | genitive of negation                 |
| HAB     | habitual                             |
| I-level | individual level                     |
| IMPF    | imperfective aspect                  |
| INSTR   | instrumental case                    |
| INTRANS | intransitive                         |
| IO      | indirect object                      |
| NEG     | negation                             |
| NOM     | nominative case                      |
| NP      | noun phrase                          |

---

|         |                                     |
|---------|-------------------------------------|
| P       | level within a prepositional phrase |
| PART    | particle                            |
| PartP   | participle phrase                   |
| PF      | perfective aspect                   |
| PF      | phonetic form                       |
| PL      | plural                              |
| PP      | prepositional phrase                |
| PPP     | past passive participle             |
| PRAP    | present active participle           |
| PredP   | predicate phrase                    |
| PrefixP | prefix phrase                       |
| PREP    | prepositional case                  |
| PRES    | present tense                       |
| QP      | quantifier phrase                   |
| REFL    | reflexive                           |
| RESULT  | resultative                         |
| S-level | stage level                         |
| S/C     | small clause                        |
| SG      | singular                            |
| SP      | subject agreement prefix            |
| Spec    | specifier position                  |
| Subj    | subject                             |
| T       | subject level within a tense phrase |
| TP      | tense phrase                        |
| $\nu$   | level within $\nu$ P                |
| $\nu$ P | (light) verb phrase                 |
| V       | level within a verb phrase          |
| VP      | verb phrase                         |

## *A Note on Transliteration*

I have used the Latin alphabets employed in Polish, Czech, Slovak, and Bosnian/Croatian/Serbian. The system of transliteration I used for the Cyrillic alphabets of Belarusian, Ukrainian, and Russian is listed below. One important point to note is the transliteration of ‘r’ as ‘g’ in Belarusian and Ukrainian, despite the tendency for scholars working on these languages to transliterate ‘g’ as ‘h’, i.e. how it is pronounced.

| <i>Cyrillic</i> | <i>Transliteration</i> | <i>Cyrillic</i> | <i>Transliteration</i> |
|-----------------|------------------------|-----------------|------------------------|
| а               | a                      | о               | o                      |
| б               | b                      | п               | p                      |
| в               | v                      | р               | r                      |
| г               | g                      | с               | s                      |
| ѓ               | g                      | т               | t                      |
| д               | d                      | у               | u                      |
| е               | e                      | ѣ               | ǔ                      |
| ё               | e                      | ф               | f                      |
| є               | je                     | х               | x                      |
| ж               | ž                      | ц               | c                      |
| з               | z                      | ч               | č                      |
| і               | i                      | ш               | š                      |
| и               | i/y (Ukranian)         | щ               | šč                     |
| ї               | ji                     | ы               | y                      |
| й               | j                      | ь               | ’                      |
| к               | k                      | ъ               | ”                      |
| л               | l                      | э               | è                      |
| м               | m                      | ю               | ju                     |
| н               | n                      | я               | ja                     |

# Introduction

The main claim in this book is that some of the most puzzling case-marking phenomena in the Slavic languages are directly linked to aspect. My goal is to account for these links between case and aspect within a syntactic framework. The statement that case and aspect are intimately connected, however, immediately raises two questions, namely: ‘what is case?’ and ‘what is aspect?’ Syntacticians often use the term *CASE*, for instance, to refer to at least two different phenomena: so-called *STRUCTURAL Case* (also known as *CANONICAL* or *SYNTACTIC Case*) versus *LEXICAL case* (also known as *NON-CANONICAL* or *QUIRKY case*).<sup>1</sup> They might also use this term to refer to three additional types of case: *INHERENT*, *SEMANTIC*, and *DEFAULT case*. The term *ASPECT* is also rife with terminological divisions. In general, linguists use this term to refer to one of two types of phenomena: so-called *LEXICAL/SEMANTIC aspect* or *GRAMMATICAL/MORPHOLOGICAL aspect*.

Consider first the differences syntacticians have posited between the five types of *C/case* listed above. As Dixon (1979, 1994) and Aikhenvald et al. (2001) state, there are transitive and intransitive clauses in languages that consist of three core grammatical categories, namely *A*, *O*, *S*:

- A* the core argument of a transitive clause, which prototypically denotes the controller or initiator of the activity described by the verb;
- O* the other core argument of a transitive clause, which prototypically denotes the participant affected by the activity described by the verb;
- S* the sole argument of an intransitive clause.

So-called *DITRANSITIVE* verbs also exist in languages. These verbs have a third argument (typically verbs like *give*, *show*, and *tell*). That is, the following four

<sup>1</sup> Throughout this book I refer to structural Case with a capital ‘*C*’ and non-structural case with a ‘*c*’ in lower case. When I wish to leave open whether a given form constitutes an instance of structural Case, I use ‘*C/c*’ in both upper and lower case, e.g. *C/case*.

possible clause types exist (the symbol E represents the non-A, non-O argument of a ditransitive):<sup>2</sup>

|                                    |   |            |
|------------------------------------|---|------------|
| Plain transitive                   | A | O          |
| Extended transitive (ditransitive) | A | O E (or O) |
| Plain intransitive                 | S |            |
| Extended intransitive              | S | E          |

It is common knowledge that different languages show diverse ways of marking the A, O, S, and E arguments. As discussed in Dixon 1994, in nominative–accusative languages, O almost always occurs in the accusative, and A and S are almost always in the nominative. In ergative–absolutive languages, A is in the ergative, and O and S are in the absolutive. That is, we have the following two patterns (Aikhenvald et al. 2001: 3):

|            |   |   |
|------------|---|---|
| Nominative | A | S |
| Accusative | O |   |
| Ergative   | A |   |
| Absolutive | S | O |

Deviations from the case patterns illustrated above, such as non-accusative marking on O in nominative–accusative languages like the Slavic languages, for instance, are often referred to as *NON-CANONICAL*, *LEXICAL*, or *QUIRKY* case marking (depending on a given construction), whereas the accusative Case on O is often referred to as *CANONICAL*, *SYNTACTIC*, or *STRUCTURAL* Case.

Many syntacticians claim that structural Case is predictable and assigned (i.e. valued) in the syntax,<sup>3</sup> whereas lexical case is unpredictable and obligatorily assigned by certain verbs and prepositions (and, as I will suggest in chapter 3, certain prefixes). The following examples from Russian illustrate the contrast between accusative structural Case and lexical case with certain verbs:

- (1) Ja čitala knigu.  
I read book-ACC  
'I read/was reading/used to read a/the/some book.'

<sup>2</sup> It is important to note that with certain verbs it is controversial as to whether the apparent O argument really constitutes an E argument, a point to which I will return in chapter 2, section 3.2, when I discuss inherent case.

<sup>3</sup> Syntactic Case valuing is discussed in detail in chapters 3, 4, and 5.

- (2) Ja kosnulas' stola.  
I touched table-GEN  
'I touched a/the table.'
- (3) Ona emu zavidujet.  
she him-DAT envies  
'She envies him.'
- (4) Ona upravljaet kanceljariej.  
she manages office-INSTR  
'She manages the office.'

Notice that the verb *čitat* 'to read' takes an accusative Case-marked argument in example (1), whereas *kosnut* 'to touch' takes a genitive argument (example 2), *zavidet* 'to envy' a dative argument (example 3), and *upravljat* 'to manage' an instrumental one (example 4). The genitive, dative, and instrumental case marking on the arguments in examples (2)–(4) is obligatory and always takes precedence over any sort of structural Case assignment in the syntax. The accusative Case on the argument in example (1), on the contrary, can be 'overridden' by another Case, such as the genitive of negation, as the following example illustrates:

- (5) Ja ne čitala knig.  
I NEG read book-GEN  
'I didn't read a/the/some book.'

This example shows that the argument of the verb *čitat* 'to read' can also occur in the genitive Case when the clause is negated. The arguments of lexical case assigning verbs, on the contrary, never occur in the genitive of negation, as example (6) below illustrates:

- (6) Ona ne upravljaet \*kanceljarii/ kanceljariej.  
she-NOM NEG manage \*office-GEN/ office-INSTR  
'She doesn't manage a/the office.'

The ability for an accusative Case-marked argument to be 'overridden' by the genitive of negation in Russian (which many believe also constitutes a type of structural Case) is considered to be one of the characteristics that defines it as a structural Case, that is, unlike lexical case, it is not obligatory (Babby 1986, 1987).

Consider now the third type of case mentioned above, that is, so-called INHERENT case (for some, the term inherent case is synonymous with lexical case). As discussed in detail in Woolford 2006, inherent case differs from both

lexical and structural C/case. Unlike lexical case, it is predictable, that is, it is associated with certain theta roles. Unlike structural Case, however, it takes precedence over any other Case assignment in the syntax, such as the genitive of negation in Russian. The dative case marking on the E internal argument with ditransitive verbs like *give*, *write*, and *show* in the Slavic languages, for instance, would constitute an inherent case. This dative case is predictably assigned to the goal/beneficiary argument, as the following example from Russian illustrates:

- (7) Ja dala Ivanu podarok.  
I gave Ivan-DAT present-ACC  
'I gave Ivan a present.'

The so-called direct object in this example (*podarok* 'present') occurs with structural accusative Case marking, whereas the so-called indirect object, that is, the goal/beneficiary *Ivanu* 'Ivan', occurs with dative case marking. This dative case marking is predictable and always takes precedence over any structural Case assignment in the syntax, that is, it is obligatory.

As already mentioned, some syntacticians also distinguish a fourth type of case, so-called SEMANTIC case. Babby and Freidin (1984) and Babby (1986), for instance, claim that when the interpretation of a particular case is directly linked to its morphological form, that morphological form constitutes a semantic case. According to their analyses, the predictable adverbial use of an instrumental case-marked NP<sup>4</sup> to mean 'by way of X' in Russian, for example, in a construction like (8) below, would constitute a semantic case.

- (8) On idet lesom.  
he walks forest-INTR  
'He is walking/walks by way of the woods.'

The instrumental case-marked argument (*lesom* 'by way of the woods') in this example contributes to the overall semantic interpretation of the sentence; thus, it would constitute a semantic case. Furthermore, some semantic cases, unlike lexical or inherent cases, can alternate with other C/cases, that is, they are not obligatory (I return to this point in chapter 2).

Finally, many syntacticians believe that in the absence of C/case assignment (or valuing) via the mechanisms associated with structural, lexical, inherent, or semantic C/case, so-called DEFAULT cases may arise (Marantz 1992; and

<sup>4</sup> Throughout this book I use the term NP for both noun phrases and determiner phrases in the Slavic languages, since the status of DPs is controversial in the Slavic languages (except Bulgarian and Macedonian). See Pereltsvaig (2007) and references therein for discussion.

Schütze 2001, among many others). In essence, default cases are thought to arise as a last resort in the syntax, preventing a derivation from crashing because an NP/DP, for instance, has not received a C/case value. Scholars have posited a number of different cases as default cases in the Slavic languages. In Russian, for instance, many have stipulated that the nominative is the default case. The dative (Richardson 2003a), accusative (Franks 1995; Pereltsvaig 2000, 2001), and instrumental (Babko-Malaya 1999) have all also been linked to default case assignment.

One of the main claims in this book is that the alternation of lexical case versus structural accusative Case marking on an internal argument<sup>5</sup> is directly linked to aspect. As already mentioned, the meaning of the term aspect, however, is not straightforward. Linguists typically distinguish two types of aspect: LEXICAL/SEMANTIC aspect versus GRAMMATICAL/MORPHOLOGICAL aspect. Lexical/semantic aspect refers to the properties of the inherent meaning of a verb (phrase). It typically refers to whether the verb phrase encodes an inherent natural endpoint or not (i.e. a *telos*). This type of aspect has also been referred to as EVENT STRUCTURE, SITUATIONAL ASPECT, VENDLERIAN ASPECT, INNER ASPECT, EVENTUALITY TYPE, or as *Aktionsart*.<sup>6</sup> When dealing with the Slavic languages, grammatical aspect refers to the imperfective–perfective contrast evident, for instance, in their verbal systems. Linguists have also classified this type of aspect as MORPHOLOGICAL ASPECT, or as VIEWPOINT or OUTER ASPECT: it is the type of aspect that refers to how the event structure (i.e. the lexical/semantic aspect) of a verb phrase is viewed. Unlike in English, many verbs in the Slavic languages are paired conventionally for the imperfective and perfective aspect. In Russian, for instance, the verb *write* has an imperfective form *pisat'* and a conventionally paired perfective form *napisat'*. Roughly speaking, perfective eventualities are limited in time (BOUNDED). To use Bach's (1986) terminology, perfective eventualities are PACKAGED as single unitary actions. These actions may be packaged for the purpose of sequencing the action in time, they may be related to a deadline or other time-frame, or

<sup>5</sup> I use the terms EXTERNAL and INTERNAL argument to refer to specific structural locations. The external argument position is the spec, vP position above VP. The internal argument position is a position within VP, i.e. either the specifier or complement position.

<sup>6</sup> It is important not to confuse the term *Aktionsart* here with its common usage in Slavic linguistics to refer to semantic distinctions expressed by verbal morphology, such as the use of verbal prefixes to focus on the manner, quantity, measure and degree of intensity of an action (such prefixes are discussed in detail in chapter 3). Slavic linguists have also used the term *Aktionsart* to refer to notions like iterativity, semelfactivity, and distributivity (see, for example, Isačenko 1960, 1962). I use the term *Aktionsart* here in keeping with its common usage in much of the general linguistics literature, in which it refers to the inherent meaning of a verb (phrase).



they may focus on the significance of reaching the inherent endpoint encoded in accomplishments and many achievements for reasons such as encoding success or failure (Chaput 1990). Imperfective verbs, on the contrary, express actions that are UNPACKAGED. They are not limited in time (UNBOUNDED), and they generally focus on actions in progress, on the duration of an action, or repetition. Furthermore, imperfective actions do not focus on completion or an endpoint.

There is a popular hypothesis in much recent work on aspect in the Slavic languages that lexical and grammatical aspect are not two distinct phenomena (e.g. Bohnemeyer and Swift 2004; Borer 2005a; Brecht 1985; Schoorlemmer 1995; and van Hout 2007, among many others). My goal in chapter 3 of this book is to demonstrate that there is a direct link between accusative structural Case marking on an internal argument and lexical aspect. This link, I claim, has nothing to do with grammatical aspect; thus, the distinction between lexical and grammatical aspect is an important one in my analysis. In chapters 4 and 5, I link the Case-marking patterns in a number of predicate constructions in the East Slavic languages to grammatical aspect. Again, these patterns have nothing to do with lexical aspect. An understanding of how lexical and grammatical aspect differ from each other in the Slavic languages is thus crucial. In chapter 2, I therefore provide a detailed definition of these two types of aspect and provide evidence that they constitute two distinct phenomena. The distinction between lexical case versus structural accusative Case marking is also crucial in my analysis, since in chapter 3 I claim that lexical case-marked arguments do not interact with lexical aspect in the same way that structural accusative arguments do. Chapter 2 therefore also provides a detailed discussion of the differences between the five types of C/cases outlined above and clarifies my assumptions about what constitutes true lexical case marking. In essence, chapter 2 lays down the terminological preliminaries required to follow the analyses in chapters 3, 4, and 5.

My main claim in chapter 3 is that the structural accusative versus lexical C/case-marking contrast on an internal argument with two-place predicates is directly linked to whether the event structure of what I refer to as a BASE verb is compositional or not. In this chapter I show that structural accusative Case-marked arguments occur with those base verbs whose event structure is affected by elements such as an internal argument or a so-called lexical prefix (lexical prefixes are defined in detail in chapter 3, section 2). Lexical case-marked arguments, on the contrary, occur with atelic base verbs whose event structure is never compositional. The analysis in this chapter sheds doubt on the hypothesis that accusative Case marking in the Slavic languages is linked to the object phi-features of *v*, a hypothesis that has recently gained popularity

among some syntacticians working on the Slavic languages (e.g. Harves 2002b, 2006, forthcoming; Lavine and Freiden 2002; and M. Richards 2005). Instead, I show that the accusative Case is directly linked to the aspectual feature in *v*. My analysis in chapter 3 provides further support for the claim that case and aspect are intimately connected in numerous languages, including Finnish (Itkonen 1976; and Kratzer 2004, among many others), Classical Greek, Latin, Hebrew (Arad 1998), Bengali and Scottish Gaelic (Ramchand 1997), Spanish (Torrego 1998), and Icelandic (Svenonius 2001).

The links between Case and aspect discussed in chapter 3 differ significantly from previous works on Case and aspect in Russian. Scholars have linked the accusative Case in Russian, for instance, to telicity, that is, to whether a verb phrase has an inherent endpoint or not (Borer 2005a; Richardson 2001b, 2003a, 2003b; and, to a certain extent, Babko-Malaya 1999), or to so-called BOUNDEDNESS and the role of an internal argument as a 'situation delimiter' (Pereltsvaig 2000, 2001). The dilemma that analyses like these face is that much accusative Case marking on an internal argument in a language like Russian is not linked to telicity, boundedness, or the role of an argument as a situation delimiter. That is, the link between accusative Case marking and aspect in these analyses appears to be weak. As will become clear in chapter 3, linking the accusative Case to the compositional event structure of a verb phrase, on the contrary, enables us to capture the general pattern that the accusative Case is 'aspectually relevant' in the Slavic languages with a wide variety of verbs, including atelic (unbounded) verbs like *stir*, *push*, *love*, and *know*.

In chapters 4 and 5, I address a C/case-marking opposition linked to a grammatical aspectual contrast, namely the instrumental versus C/case agreement dichotomy on a predicate in depictive (chapter 4), predicative participle, and copular constructions (chapter 5) in the East Slavic languages. I suggest that the instrumental Case on a predicate signals that the eventuality described by the predicate is bounded in time, whereas C/case agreement on a predicate (i.e. the same C/case on both the predicate and its antecedent) signals that the eventuality denoted by the predicate is unbounded. In these chapters, I also show that the manifestation of this grammatical aspectual contrast is sensitive to a wide variety of syntactic constraints, depending on a given construction. I therefore not only clarify the semantic interpretation of predicates with different Case-marking possibilities, but I also provide a detailed analysis of their syntax.

The East Slavic languages are unique within the Slavic language family in manifesting a grammatical aspectual contrast via morphological Case in a number of predicate constructions. Recently Dickey (2000, 2005) has

provided convincing evidence that the Slavic languages can be divided into eastern and western groups based on differences in their treatment of grammatical aspect. As will become clear in chapters 4 and 5, the behaviour of depictive, predicative participle, and copular constructions in the East Slavic languages supports Dickey's division of the Slavic languages in terms of an aspectual parameter.

## Preliminaries

### 1. Introduction

Scholars have approached the distribution and behaviour of *C/case* in the Slavic languages from numerous different perspectives, including linking *C/case* to cognitive concepts (Janda 1993a, 1993b, 2001), semantic features (Jakobson 1936/1971, 1958/1971; van Schooneveld 1978, 1986), a semantic metalanguage (Wierzbicka 1980, 1986), semantic and syntactic dichotomies (Isačenko 1960; Kuryłowicz 1960), and symbolic logic (Mel'čuk 1986; Sørensen 1957). My goal in this book is to account for certain *C/case*-marking patterns in the Slavic languages within a syntactic framework. The main claim in this book is that a number of *C/case*-marking oppositions in the Slavic languages are directly linked to aspect. As mentioned in chapter 1, the meaning of the terms *CASE* and *ASPECT*, however, is anything but straightforward, that is, there are up to five different types of *C/case* posited in the literature and two different types of aspect. The distinction between different types of *C/case* and aspect is crucial in the analyses presented in chapters 3, 4, and 5 of this book. The following sections therefore clarify my assumptions about the nature of so-called lexical versus grammatical aspect (section 2) and the distinctions between so-called structural, lexical, inherent, semantic, and default *C/case* (section 3).

### 2. Lexical versus grammatical aspect

As mentioned in chapter 1, there is a significantly popular viewpoint in much of the literature on aspect in the Slavic languages that lexical and grammatical aspect do not constitute separate phenomena (Bohnenmeyer and Swift 2004; Borer 2005a; Brecht 1985; Schoorlemmer 1995; and van Hout 2007, among many others). In what follows, I support the alternative hypothesis, namely that grammatical and lexical aspect are distinct, as posited by Borik (2002),

Dickey (2000), Filip (1999, 2000a, 2000b, 2005), Kučera (1983), Richardson (2003a, 2003b), Smith (1991/1997), and Thelin (1990), among others.

## 2.1 *Lexical aspect*

The term lexical aspect is often used to refer to Vendler's (1957) classification of verb types. Vendler, in dealing with English, suggested that all verbs fall into one of four basic eventuality types: states, activities, achievements, or accomplishments. Generally speaking, states have no internal structure, do not change during the span of time which they are true, and do not have an inherent natural endpoint (e.g. 'Jake loves Betty'). Activities are ongoing actions with internal change and duration, and, like states, they do not have an inherent natural endpoint (e.g. 'Jake watched television'). Accomplishments have duration and an inherent endpoint (e.g. 'Jake ate the pineapple'), and achievements have an instantaneous culmination or endpoint and are, arguably, without duration (e.g. 'Jake reached the summit'). There has been much debate in the literature over how many eventuality types a language has, and how these types should be classified. I adopt Vendler's classification of verb (phrase) types for descriptive purposes, and use the term *EVENTUALITY* when I do not wish to distinguish between the four types. Following Smith (1991/1997), I assume that a fifth class of verbs also potentially exists—so-called *SEMELFACTIVES*. Semelfactives are instantaneous verbs without duration that lack a preliminary or resultant stage. This class includes verbs like *push*, *hit*, *kick*, *cough*, and *knock*. Like states and activities, semelfactives lack an inherent natural endpoint and therefore cannot be classified as achievements (despite their instantaneous nature).<sup>1</sup> The lack of an inherent natural endpoint (e.g. in states, activities, and semelfactives) is the most important lexical aspectual distinction in this book. Following Garey (1957), I refer to an eventuality without an inherent natural endpoint as *ATELIC* (i.e. it lacks a *telos*), and one with an endpoint as *TELIC* (i.e. it has a *telos*).

It is possible to differentiate between atelic and telic eventualities in English with the well-known 'in X time' diagnostic.<sup>2</sup> That is, if a verb can occur with the adverbial 'in X time', it is telic, since the action has an inherent endpoint, whereas if it is ungrammatical with the 'in X time' adverbial, it is atelic. Notice, for instance, that the states, activities, and semelfactives in examples (1)–(3) below are ungrammatical with the 'in X time' adverbial,

<sup>1</sup> See Van Valin (2005) for diagnostics that differentiate semelfactives from achievements.

<sup>2</sup> For a more detailed discussion of this event structure test see Dowty (1979), Hinrichs (1985), and Verkuyl (1972).

whereas the accomplishments and achievements in examples (4) and (5) are fine.<sup>3</sup>

- |     |                                        |                  |
|-----|----------------------------------------|------------------|
| (1) | *Jake loved Anne in five years.        | (state)          |
| (2) | *Jake watched television in two hours. | (activity)       |
| (3) | *Jake pushed Anne in five minutes.     | (semelfactive)   |
| (4) | Jake ate the apple in five minutes.    | (accomplishment) |
| (5) | Jake reached the summit in two hours.  | (achievement)    |

None of the examples under (1)–(3) encodes an endpoint; thus, the ‘in X time’ adverbial is ungrammatical with these constructions, as expected. The accomplishments and achievements in examples (4) and (5), on the contrary, do encode an endpoint; thus, as expected, they are grammatical with the ‘in X time’ adverbial. In effect, the ‘in X time’ adverbial with the achievement in example (5) measures the time taken before the onset of the achievement is reached, that is, Jake did not take two hours to reach the summit, but rather it took two hours for him to climb to the summit; reaching the summit itself was arguably instantaneous. In essence, ‘the summit’ in example (5) provides a natural endpoint for the action described by the verb.<sup>4</sup>

Scholars have also used the ‘for X time’ adverbial as a diagnostic for atelicity in English. In general, states and activities (and semelfactives with an iterative interpretation) are felicitous with the ‘for X time’ adverbial, whereas achievements and accomplishments are not. This diagnostic, however, has a number of problematic characteristics. For example, as Van Valin (2005: 37) notes, states that encode an inherent property are not normally felicitous with the ‘for X time’ adverbial, despite their atelic status (e.g. \*‘Sandy was thin/tall/fat/short for an hour’). Furthermore, as Dowty (1979) points out, some accomplishments can undergo a coerced shift, whereby they are interpreted as activities if the ‘for X time’ adverbial is added to a construction, despite their fundamental telic nature (e.g. ‘John read the book for two hours’ and ‘Chris ran to the store for 5 minutes’). This test, unlike the ‘in X time’ diagnostic, is therefore arguably not a reliable test for atelicity on its own, since it can focus, for instance, on whether or not an eventuality has

<sup>3</sup> As noted by Van Valin (2005) some atelic eventualities are possible with the ‘in X time’ adverbial in the future tense, e.g. ‘Jake will watch television in five minutes’, and ‘Jake will push Mary in five minutes’. The ‘in X time’ adverbial in these types of constructions, however, measures the time taken before the onset of the action, i.e. it measures the so-called PREPARATORY STAGE (Kamp and Reyle 1993) of an eventuality and not the temporal duration of the eventuality itself. This pattern is therefore not relevant for the ‘in X time’ telicity diagnostic.

<sup>4</sup> The instantaneous nature of achievements means that generally the ‘in X time’ adverbial must refer to an exceedingly short period of time, such as ‘in a fraction of a second’ with an achievement like ‘shatter’, e.g. ‘the window shattered in a fraction of a second’ (Van Valin 2005: 37–8).

duration, rather than on whether an eventuality is fundamentally atelic. I return to another atelicity test in English in section 2.2 when I discuss the relationship between grammatical aspect and atelicity in the Slavic languages.

Scholars have also differentiated telic and atelic eventualities in terms of the so-called HOMOGENEITY PRINCIPLE, a principle which has its roots in Vendler's seminal work. In the spirit of much work done on homogeneity (e.g. Krifka 1986, 1989, 1992, 1998, among many others), I assume that in general a predicate is telic if it is not homogeneous, and 'for each predicate P, P is homogeneous iff all "parts" and "sums" of the interpretation of P can be described as P' (Borik 2002: 33). If we apply this principle to the following two examples, for instance, it is clear that only example (6) is homogeneous (i.e. atelic).

(6) Sam ran.

(7) Sam ran a mile.

Example (6) differs from example (7) in two crucial respects. First, while any 'part', that is, any distance covered, can be described as running in example (6), in example (7) the verb phrase 'ran a mile' can only be used to describe the eventuality 'ran a mile', not, for instance, running three hundred metres (Borik 2002: 15). that is to say, parts of 'run a mile' are not equivalent to 'run a mile', even if each part of 'run a mile' (each part of the distance covered) is a crucial component in the final distance covered (the mile). I assume that the crucial notion here is one of equivalence, that is, running the three hundred metre portion of 'a mile' is not equivalent to running a mile.<sup>5</sup> Second, the 'sum' of the interpretation of the predicate 'ran' in example (6) can be described as 'ran'. This is not true of the predicate 'ran a mile' in example (7). Notice, for instance, that the sum of a construction like 'Sam ran on Tuesday and on Wednesday' is 'Sam ran', whereas the sum of a construction like 'Sam ran a mile on Tuesday and on Wednesday' is not 'Sam ran a mile': in fact, he has run two miles. Thus, according to the homogeneity principle, example (6) above is atelic, since all parts and sums of the interpretation of the predicate 'ran' can be described as 'ran', whereas example (7) is telic, since all parts and sums of 'ran a mile' cannot be described as 'ran a mile.' Throughout this book I adopt the term QUANTIZED used in discussions of the homogeneity principle and refer to telic predicates as quantized (i.e. in featural terms, [+quantized]) and atelic predicates as non-quantized (i.e. [-quantized]).

<sup>5</sup> This point holds for other telic constructions, such as 'run to Paris', which are presented as problematic for the homogeneity principle by Rothstein (2004: 10). That is, parts of running to Paris are not equivalent to 'run to Paris' even though they might all be directed towards the same endpoint.

As is well known, the notion of telicity can vary greatly depending on the definitions adopted. Consider, for instance, the following definition of telicity articulated in Borer 2005a:<sup>6</sup>

- (8) *Quantity* (Borer 2005: 147):
- a. Quantity: P is a quantity iff P is not homogeneous.
  - b. P is homogeneous iff P is cumulative and divisive.

According to Borer, both cumulativity (sums) and divisiveness (parts) are necessary requirements for homogeneity and if either is lacking a predicate, must be a quantity (i.e. telic). Without going into a detailed analysis of her definition of telicity, suffice it to say that her definition predicts that predicates which focus on the starting point of an eventuality (or an intermediate point) are telic, since such predicates cannot be characterized in terms of both cumulativity and divisiveness. That is, for Borer, a *telos*—an inherent natural endpoint—is not a necessary requirement for telicity. Contra Borer, I adopt the more traditional definition of telicity, namely, a telic eventuality requires a *telos*. In terms of the homogeneity principle, I assume that if a predicate can be divided into both parts and sums and those parts and sums are not equivalent, that predicate is telic, hence the distinction between examples (6) and (7) above. I also assume, however, that some atelic predicates cannot readily be divided into both parts and sums, for instance, semelfactives like *push* (in constructions like ‘Mary pushed John’). That is, given the instantaneous nature of semelfactives, it is difficult to see how they can be divided into parts. When such divisiveness fails because it is, in a sense, irrelevant, I assume our next step is to apply an event structure test to the predicate (such as the ‘in X time’ diagnostic) to determine whether it encodes a *telos* or not. If the traditional event structure tests fail (or the ‘in X time’ adverbial measures the preparatory stage and not the time taken to reach an endpoint), we can assume the predicate is also atelic.

As noted by numerous scholars, the notion of homogeneity can apply to both verbs and nouns (for discussion, see Filip 1999, 2000a, 2000b; Hinrichs 1985; and Krifka 1989, among many others). For instance, both the parts and sums of ‘milk’, ‘water’, and ‘tea’ refer to ‘milk’, ‘water’, and ‘tea’, whereas a part of ‘a glass of milk/water/tea’ cannot be described as ‘a glass of milk/water/tea’. Thus, ‘milk’, ‘water’, and ‘tea’ are homogeneous, whereas ‘a glass of milk/water/tea’ is non-homogeneous. In what follows, I will refer to homogeneous noun phrases as non-quantized ([–quantized]) and non-homogeneous noun

<sup>6</sup> Borer captures the notion of equivalence described above in this definition. She also replaces Krifka’s notion of quantized with the term QUANTITY.



phrases as quantized ([+quantized]).<sup>7</sup> That is, I use the term non-quantized as a catch-all term for homogeneous nouns that incorporates both divisiveness (all subparts of, e.g. apples are apples) with cumulativity (apples + apples = apples).<sup>8</sup>

Vendler (1957) was primarily concerned with classifying verb types. Much work subsequent to Vendler's influential article, however, has focused on the compositional nature of an eventuality, that is, on the fact that the lexical aspect of an eventuality is not exclusively verb based (see, for instance, Dowty 1979, 1991; Tenny 1994; Van Voorst 1988; and Verkuyl 1993, among many others). A verb like 'write' in English, for instance, might be atelic on its own, but once we merge an internal argument with this verb, it could be either atelic or telic syntactically, depending on whether the internal argument is quantized or not, as the following examples illustrate:

- (9) \*John wrote in an hour. (atelic/\*telic)
- (10) John wrote the letter in an hour. (\*atelic/telic)
- (11) \*John wrote letters in an hour. (atelic/\*telic)

Example (9) shows that 'write' in its intransitive form, that is, without an internal argument, is atelic, since it cannot occur with the 'in X time' adverbial. If we add the internal argument 'the letter', however, as in (10), 'write' is telic, since it is now grammatical with the 'in X time' adverbial. Example (11) demonstrates that the nature of the internal argument plays a role in lexical aspect alternations; 'write' remains atelic when its internal argument is non-quantized (a bare plural), as suggested by the ungrammaticality of the 'in X time' adverbial in this construction versus its grammaticality in example (10) with the quantized internal argument 'the letter'. These examples make it clear that the presence or absence of an internal argument can play a role in determining the event structure of the verb phrase (example 9 versus 10), as can the status of the argument as quantized or non-quantized (example

<sup>7</sup> One attractive aspect of using the features quantized and non-quantized is that it eliminates any potential confusion which could be caused by terms such as DEFINITE, INDEFINITE, or BARE (PLURAL) when referring to Belarusian, Russian, Ukrainian, Czech, Slovak, Polish, and Bosnian/Croatian/Serbian, since these languages do not have article systems. The semantic differences manifested by the article system in English are often inferred or expressed in these Slavic languages by pragmatic or contextual factors or by prosodic devices, such as word order or stress.

<sup>8</sup> Unlike verbal predicates, I assume that for a noun to be non-quantized (homogeneous), both parts and sums of the noun must describe the same noun. If only one of these conditions is met I assume the noun is quantized. Thus, terms like 'at least three' or 'at most three', presented as problematic for the homogeneity principle by Rothstein (2004: 150), would be quantized in my analysis. As expected under the analysis presented shortly, these quantized elements result in telic verb phrases, e.g. 'John ate at least three apples/at most three apples in an hour.'

10 versus 11). That is, the event structure of the verb ‘write’ is determined compositionally and the internal argument plays a crucial role in determining the telic or atelic status of the verb phrase. I will refer to verbs like ‘write’, whose internal arguments play a crucial role in their event structure, as CREATION/CONSUMPTION verbs.<sup>9</sup>

Noun phrases are not the only elements that can affect the event structure of a verb phrase, as noted by numerous scholars (e.g. Dowty 1979, among many others). In example (13) below, for instance, the PP ‘to the store’ changes the atelic verb ‘walked’ in example (12) into a telic verb phrase. In example (15) the adjective ‘flat’ changes the atelic verb phrase ‘hammered the nails’ in example (14) into a telic verb phrase ‘to hammer the nails flat.’

- (12) John walked (\*in 10 minutes). (atelic)
- (13) John walked to the store (in 10 minutes). (telic)
- (14) John hammered the nails (\*in 10 minutes). (atelic)
- (15) John hammered the nails flat (in 10 minutes). (telic)

The examples in (9)–(11) and (12)–(15) support the well-known claim that event structure is compositional and not exclusively verb based. The compositional nature of the event structure of a verb phrase will play an important role in chapter 3, in which I focus on the role of an internal argument and prefixes in the event structure of the verb phrase in the Slavic languages.

## 2.2 Grammatical/morphological aspect

Grammatical aspect focuses on the temporal perspective of an eventuality, that is, on whether a given eventuality is BOUNDED or UNBOUNDED in time, whereas with lexical aspect the temporal perspective is irrelevant to the natural unfolding of the eventuality type; what is important is whether the eventuality has a natural terminus or not. As mentioned in chapter 1, the term grammatical aspect refers to the imperfective or perfective contrast conveyed, for instance, in the verbal systems of the Slavic languages. Roughly speaking, perfective eventualities are limited in time (BOUNDED) and they are PACKAGED as single unitary actions (Bach 1986). As discussed in Chaput 1990, these actions may be packaged for the purpose of sequencing the action in time, they may be related to a deadline or other time-frame, or they may focus on the significance of reaching the inherent endpoint encoded in accomplishments and many achievements for reasons such as encoding success or failure. Imperfective verbs, on the contrary, express actions that

<sup>9</sup> These verbs are also referred to in the literature as INCREMENTAL THEMES.

are UNPACKAGED and are not limited in time (UNBOUNDED). Imperfective actions generally focus on actions in progress, on the duration of an action, or repetition. Furthermore, imperfective actions do not focus on completion or an endpoint.

Recently a number of scholars have sought to clarify the relationship between grammatical aspect and time, that is, the relationship between boundedness (limitation in time) and the perfective aspect, and unboundedness (no limitation in time) and the imperfective aspect (e.g. Klein 1994, 1995; Pereltsvaig forthcoming-b; and Smith 1991/1997). Klein (1994), for instance, suggests that grammatical aspect defines the relationship between the Topic Time (the span of time to which the speaker's claim is confined) and the Situation Time (the actual time of an eventuality). Both of these times differ from the Utterance Time (the time at which the statement was actually said). The differences between these Times are best clarified by means of an example. Consider, for instance, the interpretation of an example like (16) below (the following example and discussion are taken from Klein 1994).

(16) The light was on.

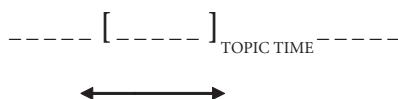
A distinction can be made between the time this construction was uttered (the Utterance Time) and the time at which the light was actually on (the Situation Time). These two times can also be distinguished from the time for which a claim about the Situation Time is made (the Topic Time). Imagine a situation, for instance, in which a judge asks a witness: 'What did you notice when you looked into the room?', and the witness responds: 'The light was on.' As Klein (1994: 4) notes, the judge's question fixes a definite Topic Time and the witness is advised to talk about this time and this time only. The witness's testimony is still true, however, if the light was on before and after the Topic Time. That is, the Topic Time simply refers to the time within which the speaker's claim is confined.

In general, a perfective verb conveys that the eventuality described by the verb is contained within the Topic Time (i.e. it is bounded), whereas an imperfective verb conveys no such implication—the eventuality holds throughout and extends beyond the Topic Time.<sup>10</sup> The following diagrams, adapted from Richardson 2003a, illustrate these two distinctions. In these diagrams the line \_ \_ \_ represents time, the boldfaced brackets [ ] the Topic Time, and the smaller non-boldfaced brackets [ ], the Situation Time.

<sup>10</sup> See Pereltsvaig (forthcoming-b) for the same claim using different terminology.

(17) *The perfective aspect:*

Eventuality occurs within the Topic Time

(18) *The imperfective aspect:*

Eventuality holds throughout and extends beyond the Topic Time

Notice that the Situation Time is only contained within the Topic Time in the diagram under (17), that is, with perfective eventualities. (This broad generalization about the way in which grammatical aspect relates the time of an eventuality to the Topic Time is not intended to imply that grammatical aspect is treated identically in all the Slavic languages. In section 2.3 I discuss some of the differences in the grammatical aspectual systems across the Slavic languages.)

What is crucial for our purposes at this stage is that the defining characteristic of an imperfective or perfective eventuality as unbounded or bounded in time is distinct from the notion of telicity. Consider, for instance, a construction like example (19) below from Russian.

- (19) Ja            pisala            pis'mo.  
 I-NOM   wrote-IMPF   letter-ACC  
 'I wrote a/the/some letter.'  
 'I was writing a/the/some letter.'  
 'I used to write a/some letter.'

The verb *pisala* 'wrote' in this example is in the imperfective aspect, yet the verb phrase *pisala pis'mo* describes a situation that involves a final state at which the whole letter exists; thus, it is telic. The use of the imperfective aspect in this example affects the way this telic eventuality is viewed: it signals that focus on the successful completion of writing the letter is not crucial in the discourse, although in the right context, the verb phrase in this construction can be interpreted as completed.<sup>11</sup> In fact, as discussed in Filip 2000a,

<sup>11</sup> See Chaput (1985, 1990), Galton (1980), Israeli (1996), and Padučeva (1993) for discussion of some of the contextual, discourse, and pragmatic factors that favour the use of the imperfective aspect even when it is understood that an eventuality is completed. In general, these factors are consistent with the

imperfective creation/consumption verbs like *write* and *eat* can have a number of different interpretations in Russian (and the other Slavic languages), depending on context. She provides the following five possible interpretations of the imperfective verb phrase *Ivan jel jabloko*, for instance, in Russian.<sup>12</sup>

- (20) Ivan            jel            jabloko.  
 Ivan-NOM ate-IMPF apple-ACC
- 'Ivan was eating an/some/the apple.' (progressive reading)
  - 'Ivan ate at an/some/the apple.' (partitive)
  - 'Ivan ate all the apple/the whole apple.' (completive reading)
  - 'Ivan ate an/some/the apple [and did not finish eating it].' (general factual)
  - 'Ivan repeatedly ate an/some apple.' (iterative)
  - 'Ivan used to eat an/some apple.' (generic)
- (Filip 2000a: 14)

Filip states that since the verb *jest* 'to eat' in an example like (20) is a creation/consumption verb, we expect the (direct) internal argument to play a crucial role in the event structure of the verb phrase (just as it does in English). That is, if the internal argument is quantized like 'an/the apple', the verb phrase should be telic (quantized), whereas if the internal argument is non-quantized like 'apples', the verb phrase should be atelic (non-quantized), since quantized internal arguments result in telic verb phrases and non-quantized internal arguments result in atelic verb phrases with creation/consumption verbs.

claim above that the perfective aspect focuses on the fact that the Situation Time of an eventuality is contained within the Topic Time. Consider, for instance, the following oft-cited example in Russian:

- i. Vy            čitali            'Vojnu i            mir'?  
 you-NOM read-IMPF war            and peace-ACC  
 'Have you read *War and Peace*?'

Israeli (1996) claims that the imperfective aspect is appropriate in this example, despite the fact that it is understood that the speaker is asking about a completed eventuality, because there is no "contract" between the speaker and addressee that s/he should have read *War and Peace*. In effect, in this question no specific Topic Time is established during which the speaker asks whether the reading eventuality was completed, which can result in the nuance that the speaker did not expect the addressee to have read *War and Peace*. That is, this construction is roughly equivalent to English 'Have you ever read *War and Peace*?' Changing the verb to the perfective aspect in this example (*pročitat*) often results in an implication that the addressee was expected to have read *War and Peace*, e.g. for an assignment, etc. This nuance of expectation falls out naturally from the fact that the perfective aspect is used when a specific Topic Time is established during which an eventuality is bounded (completed). The perfective aspect in the question above would therefore result in the speaker asking whether the reading eventuality was completed within a Topic Time, which in turn can result in the nuance of expectation that it should have been completed. This question can be roughly translated into English as 'Did you read *War and Peace*?'

<sup>12</sup> The term GENERAL FACTUAL refers to the general assertion of a past action. It is also referred to as *konstatacija fakta* (Rassudova 1968).

As Filip points out, single count internal arguments in constructions like (20) retain their quantized interpretation in the scope of the imperfective aspect; thus, this example must constitute a quantized (telic) verb phrase.

One of the main reasons a number of scholars appear to have posited a link between (im)perfectivity and (a)telicity in the Slavic languages is because the ‘for X time’ adverbial is generally felicitous with imperfective eventualities, but not perfective ones, whereas the ‘in X time’ adverbial is generally compatible with perfective eventualities, but not imperfective ones. Exceptions to this generalization include the grammaticality of the ‘for X time’ adverbial with perfective verbs like Czech *nanosit* (*dříví*) ‘to bring (a sufficient amount of wood)’ (for discussion, see Filip 1999: 200–7), and Russian verbs like *poiskat’* ‘to search for a while’ and *prosidet’* ‘to sit for a while’.<sup>13</sup> The ‘in X time’ adverbial is also grammatical with an imperfective verb if the eventuality described by the verb phrase is perceived as a totality (quantized) repeated on numerous occasions, as the following example from Russian illustrates:<sup>14</sup>

- (21) Vanja            vsegda    pisal               doklady        za    odnu    noč’.  
 Vanja-NOM    always    wrote-IMPF    papers-ACC    in    one    night  
 ‘Vanja always wrote his papers in a night.’  
 (Richardson 2003a: 62)

Notice, however, that the verb phrase *jest’ jabloko* ‘to eat an/the apple’ in Russian is ungrammatical with the ‘in X time’ adverbial with the verb in the imperfective aspect, despite the fact that it describes a telic eventuality, that is, it is only grammatical with the ‘for X time’ adverbial, as example (22) below illustrates.<sup>15</sup> This pattern has led some scholars to claim that a verb phrase like *jest’ jabloko* is atelic in Russian (e.g. Schoorlemmer 1995).

- (22) Ivan            jel                jabloko        5 sekund/    \*za    5 sekund.  
 Ivan-NOM    ate-IMPF    apple-ACC    5 seconds/    \*in    5 seconds  
 ‘Ivan ate an/the/some apple for five seconds.’  
 ‘Ivan was eating an/the/some apple for five seconds.’

That the ‘for X time’ adverbial is grammatical in this example is not surprising, since, as mentioned above, this adverbial measures whether an eventuality has duration or not and one of the very purposes of the imperfective aspect

<sup>13</sup> See Schoorlemmer 1995 for grammatical aspect diagnostics and evidence that verbs like these are indeed perfective in Russian.

<sup>14</sup> See Borik 2002 for further examples of the felicitous use of the imperfective aspect with the ‘in X time’ adverbial in Russian.

<sup>15</sup> When translating imperfective verbs from the Slavic languages into English I will provide just two translations: the progressive and the completive/general factual interpretations, even though other readings might be possible.

in the Slavic languages is to encode duration. In effect, the ‘for X time’ adverbial cannot be used as a diagnostic for atelicity in the Slavic languages (recall that it is also a problematic diagnostic in English). That the verb phrase in this example is ungrammatical with our ‘in X time’ test for telicity seems, on the surface, more problematic. The ‘in X time’ adverbial can, however, be used as a diagnostic for telic eventualities, but only with perfective verbs. Consider, for instance, the grammaticality of examples (23)–(25) below in Russian, Czech, and Bosnian/Croatian/Serbian (BCS).

- (23) Ja pročitala ‘Vojnu i mir’ za nedelju. (Russian)  
 I-NOM read-PF war and peace-ACC in week  
 ‘I read *War and Peace* in a week.’
- (24) Přečetla jsem knihu za (jeden) měsíc. (Czech)  
 read-PF AUX book-ACC in (one) month  
 ‘I read a/the book in a month.’
- (25) Pročitao sam tu knjigu za ned(j)elju/tjedan dana. (BCS)  
 read-PF AUX that book-ACC in week day  
 ‘I read that book in a week.’

Notice that all these examples are grammatical with the ‘in X time’ adverbial. The verbs in these examples are in the perfective aspect, they are creation/consumption verbs, they occur with quantized internal arguments, and they are therefore telic. Now consider the ungrammatical examples under (26)–(29) below.

- (26) \*Ja potancevala za 5 minut. (Russian)  
 I-NOM danced-PF in 5 minutes  
 ‘I danced for a while (\*in 5 minutes).’
- (27) \*Alya tolknula teležki za 5 minut.  
 Alya-NOM pushed-PF carts-ACC in 5 minutes  
 ‘Alya pushed the carts (\*in 5 minutes).’
- (28) \*Boris se zúčastnil pohřbu za jednu  
 Boris-NOM REFL participated-PF funeral-DAT in one  
 hodinu. (Czech)  
 hour  
 ‘Boris participated in a funeral (\*in one hour).’
- (29) \*Milan je polaskao šefu za ned(j)elju/tjedan dana. (BCS)  
 Milan-NOM AUX praised-PF boss-DAT in week day  
 ‘Milan praised his boss (\*in a week).’

Notice that all of these constructions are ungrammatical with the ‘in X time’ adverbial, despite the fact that these verbs are also in the perfective aspect. All of the verb phrases in these examples are atelic—they do not encode an inherent natural endpoint. The verb *potancevat* ‘to dance for a while’ in Russian, for instance, is an activity, and *tolknut* ‘to push’ is a semelfactive. The verb *zúčastnit se* ‘to participate’ in Czech is an activity, as is *polaskati* ‘to praise’ in BCS. The grammaticality of the ‘in X time’ adverbial with the clearly telic verb phrases in examples (23)–(25) versus its ungrammaticality with the atelic verb phrases in examples (26)–(29) suggest that the ‘in X time’ adverbial can be used as a diagnostic for telicity in the Slavic languages, but only with perfective verbs. These examples also obviously show that the ‘in X time’ adverbial cannot be used as a diagnostic for perfectivity in the Slavic languages.<sup>16</sup>

The dilemma we still face is how we prove that an eventuality like *jest’ jabloko* ‘to eat an/the apple’ with a verb in the imperfective aspect is telic, despite its ungrammaticality with the ‘in X time’ adverbial. As discussed in Borik 2002, there is an (a)telicity test we can apply to imperfective verb phrases in the Slavic languages, namely the progressive test. According to this test, only atelic predicates license a present perfect inference or entailment from a verb in the progressive aspect. The following examples from English should help to clarify this point.<sup>17</sup> In example (30) below, the progressive verb phrase ‘is driving the car’ entails the present perfect inference ‘Mary has driven the car’, and is thus atelic. The progressive verb phrase ‘is running a mile’ in example (31), however, does not entail the present perfect inference ‘has run a mile’, and is therefore telic:

- (30) Mary is driving the car.  
Entails: Mary has driven the car.
- (31) Mary is running a mile.  
Does not entail: Mary has run a mile.

Consider now what happens when we apply this test to the Russian imperfective verb phrase *jel jabloko* from example (20) above. Notice that the present perfect inference ‘has eaten the apple’ is absent, for example:<sup>18</sup>

<sup>16</sup> See Filip 1999 and Borik 2002 for further discussion of imperfectivity and perfectivity diagnostics and evidence that a one-to-one correlation between (im)perfectivity and (a)telicity does not exist in Slavic.

<sup>17</sup> For discussion of this test in English, see Dowty 1979, Hinrichs 1985, and de Swart 1988.

<sup>18</sup> See Comrie 1976, Forsyth 1970, Paslawska and von Stechow 2002, and Padučeva 1986 for evidence that although Russian (and a number of other Slavic languages) has no perfect morphology, it has temporal PERFECT readings.



- (32) *Kogda pozvonila mama, Ivan jel jabloko.*  
 When phoned-PF mum-NOM Ivan-NOM ate-IMPF apple-ACC  
 ‘When Mum called, Ivan was eating an/the/some apple.’

The lower clause *Ivan jel jabloko* in this example does not have the present perfect inference that Ivan has eaten the apple (up), it only has the progressive interpretation that he was engaged in eating the apple. Compare now the different interpretation of the lower clause *Ivan pil čaj* in an example like (33), also taken from Russian.

- (33) *Kogda pozvonila mama, Ivan pil čaj.*  
 when phoned-PF mum-NOM Ivan-NOM drank-IMPF tea-ACC  
 ‘When Mum called, Ivan was drinking tea.’

Unlike example (32), the verb phrase *pil čaj* in this example can have the present perfect inference ‘Ivan has (already) drunk tea’. That is, the progressive test in examples (32) and (33) differentiates between telic (example 32) and atelic (example 33) eventualities when the verb is in the imperfective aspect and it provides conclusive evidence that a verb phrase like *jest’ jabloko* ‘to eat an/the apple’ is indeed telic, despite the imperfective aspectual marking on the verb.<sup>19</sup>

The progressive test, like the ‘in X time’ test with perfective verbs, can be used as a diagnostic for (a)telicity with imperfective verbs in all the Slavic languages (see Gebert 1992 for the claim that all of the Slavic languages encode a PERFECT distinction). The following examples from BCS, for instance, illustrate that the patterns outlined above are not limited to Russian.

- (34) *Kada je mama nazvala, Ivan je*  
 when AUX mum-NOM phoned-PF Ivan-NOM AUX  
*jeo jabuku.*  
 ate-IMPF apple-ACC  
 ‘When mum called, Ivan was eating a/the apple.’
- (35) *Kada je mama nazvala, Ivan je*  
 when AUX mum-NOM phoned-PF Ivan-NOM AUX  
*pio čaj.*  
 drank tea-ACC  
 ‘When mum called, Ivan was drinking tea.’

<sup>19</sup> See Borik (2002: 18–19) for a discussion of the intricacies of this test for Russian, including the necessity of a matrix *kogda* ‘when’ clause to force the progressive reading in the lower clause.

Like Russian, example (34) above does not entail that Ivan has eaten the apple (up), whereas example (35), on the contrary, implies that Ivan has drunk tea.<sup>20</sup>

Thus, there are at least two event structure diagnostics we can apply to test the (a)telicity of imperfective and perfective verbs in Slavic: the progressive test (with imperfective verbs) and the ‘in X time’ test (with perfective verbs). These tests highlight the fact that grammatical aspect and semantic aspect are two distinct phenomena in the Slavic languages. Throughout this book, I will therefore use the terms bounded and unbounded to refer only to grammatical aspectual patterns, and the terms telic and atelic to refer to semantic aspectual phenomena.

The discussion of aspect in this section may have created the misleading perception that the treatment of grammatical aspect is identical across all the Slavic languages. The following section therefore briefly outlines some of the main differences in the treatment of grammatical aspect across the Slavic languages. These differences are important because they provide some insight into why the aspectual patterns discussed in chapters 4 and 5 of this book only occur in the East Slavic languages.

### 2.3 *Grammatical aspect across the Slavic languages*

Dickey (2000, 2005) provides convincing evidence that the Slavic languages can be divided into two groups—an eastern group and a western one—based on their treatment of grammatical aspect. According to Dickey, the eastern group of languages includes Russian, Ukrainian, and Bulgarian, whereas the western group includes Czech, Slovak, and Slovene. Polish and BCS occupy a transitional zone between these two groups, occasionally patterning with the eastern group, occasionally with the western. Dickey does not include Belarusian in his analysis, due to his lack of access to native speakers. In chapters 4 and 5, I will suggest that Belarusian patterns with the eastern group of languages, which should come as no surprise, given its geographical proximity to Russian and Ukrainian. Some of the main patterns that distinguish the eastern and western languages from each other include the different distribution of either a perfective or imperfective verb in: (i) habituals; (ii) general factual constructions; (iii) historical narrative present constructions; (iv) descriptive running instructions (including stage directions); (v) sequenced events; and (vi) deverbal nouns. In habitual constructions, for instance, the perfective aspect frequently occurs in the western languages

<sup>20</sup> I am grateful to Dejan Ivković for discussing these examples with me (along with many more).

with accomplishments or achievements in the past tense, whereas in the eastern languages, the imperfective occurs. Furthermore, general factual constructions in the eastern languages occur in the imperfective aspect, whereas in the western languages they occur in the perfective, and deverbal nouns are productively formed from both aspects in the western languages, whereas in the eastern languages they are derived from imperfective verbs. The examples under (36) below illustrate the different aspectual forms that arise in habitual constructions across the two groups.

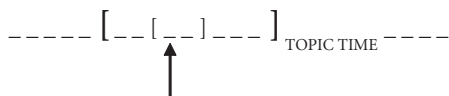
(36) *Habitual constructions:*

- a. Vypije jednu skleničku vodky denně. (Czech)  
drinks-PF one glass vodka day  
‘S/he drinks one glass of vodka a day.’
- b. Vypije jeden pohárik vodky denne. (Slovak)  
drinks-PF one glass vodka day  
‘S/he drinks one glass of vodka a day.’
- c. Každýj den’ on \*vyp’et/ vypivaet po odnoj  
every day he \*drinks-PF/ drinks-IMPF po one  
rjumke vodki. (Russian)  
glass vodka  
‘He drinks one (small) glass of vodka every day.’
- d. Ščodnja vin \*vypje/ vypyvaje čarku horilky. (Ukrainian)  
every-day he \*drinks-PF/ drinks-IMPF glass brandy  
‘He drinks a glass of brandy every day.’  
(Dickey 2000: 52–53)

These examples show that in Czech and Slovak habituals, a verb in the perfective aspect is grammatical, whereas this pattern is ungrammatical in Russian and Ukrainian. According to Dickey, the different distribution of aspectual forms across the Slavic languages in constructions like these is directly related to the different meanings encoded by the imperfective–perfective opposition in the two groups. Dickey maintains that in the western languages the meaning of the perfective aspect, for instance, is *TOTALITY*—the meaning commonly ascribed to the perfective aspect in all the Slavic languages. The term *totality* ‘refers to the construal of a situation as an indivisible whole in time, including its beginning, middle, and end’ (Dickey 2005: 2). Dickey claims that in the eastern languages, on the contrary, the meaning of the perfective is *TEMPORAL DEFINITENESS*. According to him, for an eventuality to be temporally definite it must be viewed as both a *totality* and as qualitatively different from prior and/or subsequent states of affairs,

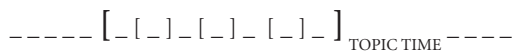
that is, it is (a totality that is) uniquely locatable in time. Thus, according to Dickey, the perfective aspect is grammatical in the Czech and Slovak habitual constructions above because the repeated eventuality is viewed as a totality on each individual repetition. In Russian and Ukrainian, on the contrary, habituality is incompatible with temporal definiteness, since: ‘unique locatability is incompatible with the indefinite distribution along the time axis of a habitually repeated situation’ (Dickey 2000: 54–5). Dickey maintains that the imperfective aspect is therefore obligatory in habituals in the eastern languages, since the imperfective signals that there is no assignment of the eventuality to a single point in time.<sup>21</sup> The following diagrams illustrate this difference between the treatment of the perfective aspect in the eastern and western groups:

(37) *The perfective aspect in the eastern languages:*



The eventuality is contained within the Topic Time and it is uniquely locatable in time

(38) *The perfective aspect in the western languages:*



The repeated eventuality is viewed as a totality on each individual repetition.

I do not explore the finer semantic nuances encoded by the imperfective and perfective aspect in the different Slavic languages. What is significant for my analysis is that the Slavic languages can be divided into two groups, a western and an eastern group, based on their treatment of grammatical aspect. This division is supported by the patterns I discuss in chapters 4 and 5, in which

<sup>21</sup> The perfective aspect is possible in habitual constructions in Russian if the habitual describes a sequence of events, e.g.:

i. On vsegda tak— vyp'et kofe i pojdet na rabotu.  
 he always so drinks-PF coffee and goes to work  
 'He always does this—drinks a cup of coffee and heads off to work.'  
 (Dickey 2005: 3)

Dickey claims that the perfective is possible in sequential constructions like these because the drinking eventuality is presented as the first of two sequential situations on the level of a representative instance, and as such it fulfils the uniqueness condition. See his analysis for further discussion.

I show that only the eastern group of languages (with rich C/case morphology) manifest an aspectual contrast using Case morphology in depictive secondary predicate, predicative participle, and copular constructions. I will demonstrate that these aspectual contrasts mirror the grammatical aspectual distinctions conveyed by verbal aspect in the Slavic languages.

Thus far, I have focused on the distinction between lexical and grammatical aspect in the Slavic languages. This distinction is crucial in the analysis of different C/case-marking patterns in chapters 3, 4, and 5. The remainder of this chapter clarifies my assumptions regarding the nature of different types of C/case in the Slavic languages.

### 3. What is case?

As discussed in chapter 1, there are up to five types of C/case referred to in the syntactic literature: SYNTACTIC/STRUCTURAL/CANONICAL; LEXICAL/QUIRKY/NON-CANONICAL; INHERENT; SEMANTIC; and DEFAULT C/case. The distinction between lexical case and other types of case is crucial in this book; thus, the following sections clarify my assumptions regarding the nature of true lexical case marking in the Slavic languages.

#### 3.1 *Structural versus lexical C/case marking*

All of the Slavic languages under analysis have both structural and lexical C/case marking. As mentioned in chapter 1, the hallmark of lexical case in the Slavic languages is that it is unpredictable and obligatory. There is nothing about the inherent meaning of a verb, for instance, that unambiguously and consistently predicts whether that verb will assign a lexical case to its argument. As noted by Schoorlemmer (1995: 70), for example, both the verbs *izmenit'* and *predat'* mean 'to deceive/betray' in Russian, yet *izmenit'* takes a dative case-marked argument, whereas *predat'* takes an accusative one. Furthermore, the verbs *podražat'* and *imitirovat'* in Russian both mean 'to imitate', yet *podražat'* takes a dative argument and *imitirovat'* an accusative one. This phenomenon also exists in other Slavic languages. In Slovak, for instance, the verbs *dotknúť sa*, *ublížiť*, and *krivdit'* all mean 'to offend', yet *dotknúť sa* takes a genitive argument, whereas *ublížiť* and *krivdit'* take dative ones. These patterns suggest that there is nothing about the semantics of the verb that leads to its selection of a lexical case-marked argument, that is, lexical case marking is unpredictable.

Further evidence for the unpredictable nature of lexical case marking comes from the fact that verbs with similar meanings select different lexical cases across a number of Slavic languages. In Russian, for instance, many

verbs of governing, ruling, or managing take an instrumental case-marked internal argument, whereas verbs conveying similar meanings in Czech take dative arguments:<sup>22</sup>

- (39) *Russian verbs of governing/ruling (all verbs take the instrumental case):*
- |                                                   |                                                                          |
|---------------------------------------------------|--------------------------------------------------------------------------|
| <i>vedat'</i>                                     | 'to manage, be in charge of'                                             |
| <i>zavedovat'</i>                                 | 'to manage, superintend, to be in charge'                                |
| <i>komandovat'/s~</i>                             | 'to command, be in command (of)'                                         |
| <i>pravit'</i>                                    | 'to rule over, govern; to drive, to steer'                               |
| <i>rasporjažat'sja/</i><br><i>rasporjadit'sja</i> | 'to be in charge, to be the boss/to<br>manage/to deal (with)'            |
| <i>rukovodit'</i>                                 | 'to lead, to guide, to direct, to manage'                                |
| <i>upravljat'</i>                                 | 'to manage, administer, direct, run, to<br>govern, to be in charge (of)' |
- (40) *Czech verbs of governing/ruling (all verbs take the dative case):*
- |                  |                          |
|------------------|--------------------------|
| <i>dominovat</i> | 'to dominate'            |
| <i>poroučet</i>  | 'to command'             |
| <i>vévodit</i>   | 'to rule over, dominate' |
| <i>vládnout</i>  | 'to govern, rule'        |

Furthermore, in BCS the verb *zavoditi/zavesti* 'to manage, superintend', which is similar in meaning to Russian *zavedovat'* + INSTR 'to manage, superintend', takes an accusative Case-marked argument, yet other verbs of governing or managing take lexical case-marked arguments, for example, *gospodariti* + INSTR 'to govern, manage, direct', and *upravljati* + INSTR 'to govern, manage, run, administer, control'. These patterns illustrate that there is nothing in the semantics of these verbs of governing, ruling, or managing that unambiguously leads to the assignment of a particular morphological case ending on a verb's internal argument.

The other characteristic of lexical case marking is that it cannot be overridden by syntactic operations that result in structural Case marking. As noted in chapter 1, many syntacticians working on the Slavic languages believe that the genitive case assigned under negation with transitive verbs in some of the Slavic languages is a structural Case (see, for instance, Babyonyshev 1996; Bailyn 1997; Brown 1999; and Harves 2002a, 2002b). The genitive of negation

<sup>22</sup> Throughout this book all verbs in lists are in imperfective and perfective pairs, where such pairs exist, and the imperfective form is always listed first. If only one verb is listed, this form is in the imperfective aspect, unless noted otherwise. Just the prefix is listed for perfective verbs which consist of a prefix attached to the imperfective verb.

(GN) is productive in Belarusian, Russian, Ukrainian, and Polish.<sup>23</sup> The GN targets an internal argument that would be assigned the accusative Case in an affirmative construction. The GN can never target an argument with lexical genitive, dative, or instrumental case marking. That is, a structural Case (like the GN) can take precedence over another structural Case (like the accusative), but it can never take precedence over lexical case assignment. The examples under (41) below illustrate this pattern in Polish (see chapter 1 for examples of this pattern in Russian), a language in which the GN is obligatory in a construction like (41b):

(41) *The Genitive of negation in Polish:*

- a. Czytałam książkę.  
read book-ACC  
'I read a/the book.'
- b. Nie czytałam tych książek.  
NEG read those-GEN books-GEN  
'I haven't read those books.'
- c. Dziewczyna nie nawymyślała swojemu chłopakowi/  
girl NEG scold her boyfriend-DAT/  
\*swojego chłopaka.  
\*her boyfriend-GEN  
'The girl didn't scold her boyfriend.'
- d. On nie pogardził mną/ \*mię.  
he NEG despised me-INSTR/ \*me-GEN  
'He didn't despise me.'

Examples (41a) and (41b) illustrate that the GN targets the accusative argument in affirmative constructions, whereas examples (41c) and (41d) show that it cannot target lexical case-marked arguments, that is, lexical case marking is obligatory: it always takes precedence over a structural Case. The GN in the East Slavic languages and Polish therefore essentially provides us with a diagnostic for structural Case marking.

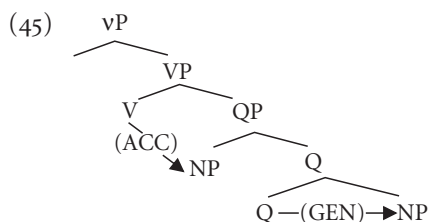
The distribution of C/case-marking patterns with numerals provides a further diagnostic for distinguishing structural Case from lexical case in the

<sup>23</sup> There are remnants of the genitive of negation in BCS. See Gortan-Premk 1962, Laškova 1968, and Stevanović (1974, 1989) for discussion. The GN with transitive verbs is not well represented in Czech and Slovak. It has almost completely disappeared from Prague/Bohemian Czech, but is found in Moravian dialects (for discussion, see Hausenblas 1958). In Slovak the GN is more frequent in dialects near the Polish, Ukrainian, and Moravian borders, and less frequent near the Hungarian border (for discussion, see Levinson 2005 and references therein).

Slavic languages.<sup>24</sup> Consider, for instance, the behaviour of numerals in Czech, Slovak, and BCS. In these languages both the numerals and the nouns following them decline, although in BCS just the numerals 1–4 decline; thus, I only consider the behaviour of these numerals below. In Czech and Slovak, for instance, a verb like *read* assigns the accusative Case to a numeral, but the noun following the numerals 5 and above occurs in the genitive plural. In BCS the numeral after the verb *read* goes into the accusative Case, whereas the noun following the numeral goes into the genitive singular. Examples (42)–(44) illustrate these patterns.

- (42) Přčetla jsem pět knih. (Czech)  
 read AUX five-ACC books-GEN.PL  
 'I read five books.'
- (43) Čítam päť kníh. (Slovak)  
 read five-ACC books-GEN.PL  
 'I am reading five books.'
- (44) Čítam dv(ij)e knjige. (BCS)  
 read two-ACC books-GEN.SG  
 'I am reading two books.'

If we assume, in the spirit of Babby (1987) and Franks (1994, 1995), that the numeral itself is merged within a quantifier phrase (QP), then the pattern that these examples illustrate is that the numeral receives structural accusative Case, but the head of the QP in turn assigns or values the genitive Case on its complement, that is, on the element following the numeral. The following (simplified) configuration illustrates this generalization:<sup>25</sup>



<sup>24</sup> This diagnostic, along with the GN, is based on tests posited for lexical case in Russian in Babby and Freiden 1984 and Babby 1980a, 1986.

<sup>25</sup> The syntactic intricacies of quantifier phrases are not relevant to the generalizations discussed here. See Babby (1986), Franks (1994, 1995, 2002), and Bošković (2006) for more detailed discussion of QPs in the Slavic languages.



Now consider what happens when the numeral phrase (QP) occurs after a lexical case assigning verb. The following examples illustrate that with lexical case assigning verbs, the numeral goes into a lexical case, as does the noun immediately following it, that is, the genitive Case is no longer licensed:<sup>26</sup>

(46) *Numerals in Czech with lexical case assigning verbs:*

- a. Vládla pěti státům/ \*států.  
ruled five-DAT states-DAT/ \*states-GEN.PL  
'She ruled five states.'
- b. Opovrhuje pěti učiteli/ \*učitelů  
despises five-INSTR teachers-INSTR/ \*teachers-GEN.PL  
'S/he despises five teachers.'

(47) *Numerals in Slovak with lexical case assigning verbs:*

- a. Spreneveril som sa piatim priateľom/ \*priateľ'ov.  
deceived AUX REFL five-DAT friends-DAT/ \*friends-GEN.PL  
'I deceived five friends.'
- b. Opovrhujem piatimi učiteľmi/ \*učiteľ'ov.  
despise five-INSTR teachers-INSTR/ \*teachers-GEN.PL  
'I despise five teachers.'

(48) *Numerals in BCS with lexical case assigning verbs:*

- a. Imponavati/imponirati dv(ij)ema d(j)evojkama/ \*d(j)evojke.  
to-impress two-DAT girls-DAT/ \*girls-GEN.SG  
'To impress two girls.'
- b. Ja upravljam dvema provincijama/ \*provincije.  
I govern two-INSTR provinces-INSTR/ \*provinces-GEN.SG  
'I govern two provinces.'

If we assume, in the spirit of Babby (1987), among others, that the genitive Case assigned within the QP in examples (42)–(44) above is a structural Case, then the examples under (46)–(48) illustrate that—like the GN—such Case assignment is blocked in the presence of a lexical case assigner. That is, they provide further support for the claim that lexical case marking is obligatory.

Throughout this book, I assume that structural Cases like the accusative, the genitive of negation, and the genitive assigned within QPs, are the result of

<sup>26</sup> The patterns in BCS hold when these numerals actually decline. Declension of the numeral is not obligatory, in which case the genitive Case can occur after the numeral even with a lexical case assigning verb. This same pattern holds in general with numerals above four. See Franks (1994, 1995, 2002) for discussion of this phenomenon.

syntactic processes. I outline the syntactic processes responsible for structural accusative Case marking in detail in chapter 3. I follow the popular convention in much of the syntactic literature on structural Case and assume that the nominative Case on an external argument is linked to the phi-features (i.e. the gender, number, and person features) of a tense phrase (TP). There is a somewhat popular hypothesis in some of the syntactic literature on accusative Case marking that the accusative Case is linked to the object phi-features on the verb. This hypothesis has garnered acceptance among a number of linguists working on Slavic syntax (e.g. Harves 2002b, 2006; Lavine and Freiden 2002; and M. Richards 2005, among others). One of the goals of chapter 3 of this book is to show that this hypothesis is incorrect for most of the Slavic languages. I will illustrate that the accusative Case is instead linked to lexical aspectual patterns in the Slavic languages, and that these patterns do not hold for lexical case assigning verbs. In a sense, therefore, lexical case assignment is not completely unpredictable—there are predictable patterns that become evident once we analyse the link between C/case and semantic aspect, as will become clear. Following many others, I assume that lexical cases are listed in the lexicon for certain verbs.

As a sidenote, Fowler (1996a) suggests that apparent dative lexical case-marked arguments are not equivalent to lexical genitive or instrumental case-marked arguments in Russian, since the verbs with which they occur do not undergo passivization, although he leaves open the exact nature of the structural distinction between datives and other lexical case-marked arguments. Fowler's claim that instrumental case-assigning verbs undergo passivization is based on the ability of less than half of the forms he identifies (six verbs out of seventeen) to undergo passivization. He notes, however, that 'in cases of linguistic variation where one variant represents the occurrence of a certain process (in this case, passivization) and the other represents the failure of that process to occur (the absence of certain potential passive forms [...]), it is almost invariably preferable to assume that the grammar allows for the process (i.e. passivization is possible with Instrumental- and Genitive-complement verbs), while other extra-grammatical factors [...] may interfere with the process' (Fowler 1996a: 532). Fowler does provide examples of dative verbs that allow passivization, but claims that these forms are either due to French influence or they are archaisms. His claim that French influenced the ability of certain dative case-assigning verbs to undergo passivization is based on a description in Vinogradov 1982. It is true that Vinogradov states that the behaviour of certain verbs in Russian changed under the influence of French. In fact, one of the verbs he claims was influenced by French is listed in Fowler's table of genitive case-assigning

verbs that passivize (*dostignut'* + GEN 'to reach, attain, achieve'). Why the influence of French (which was by no means limited to passivization patterns) should be sufficient to rule out the possibility that dative case-assigning verbs also allow passivization is not immediately obvious, especially given Fowler's statement that it is invariably preferable to assume that the grammar allows for a process when there is evidence in general for its occurrence. In fact, we do have evidence in general for the occurrence of passivization with dative case-assigning verbs. Consider, for instance, the following example presented in Fowler's article, in which a dative case-assigning verb has undergone passivization:

- (49) Korabl' byl povrežden ...  
 ship-NOM was damaged  
 'The ship was [irreparably] damaged ...'  
 (Fowler 1996a: 530)

Fowler claims that the verb *povređit'* 'to injure' participates in two aspectual pairs: *vredit'*/*povređit'* and *povreždat'*/*povređit'*. The first pair, he notes, takes a dative case-marked argument, whereas the second pair takes an accusative argument and means 'irreparably damage an inanimate object'. He maintains that the passive is possible in an example like (49) above because it is based on the accusative Case-assigning verb. Consider, however, the following examples (I use the feature [+AGR] in these examples to indicate that the predicate exhibits phi-agreement with the nominative Case-marked argument):

- (50) Sigarety povredili zdorov'ju Ivana.  
 cigarettes-NOM damaged-[+AGR] health-DAT Ivan-GEN  
 'Cigarettes damaged Ivan's health.'
- (51) Zdorov'je Ivana bylo povreždeno (sigaretami).  
 health-NOM Ivan-GEN was damaged-[+AGR] (cigarettes-INSTR)  
 'Ivan's health was damaged by cigarettes.'

Most native speakers find these two constructions perfectly acceptable. Notice that the verb in example (50) assigns the dative case, not the accusative. Notice further that this same verb can be passivized, as example (51) illustrates, that is, it is the dative case-assigning verb *povređit'* that has undergone passivization.

Fowler's other claim—that further examples of passivized dative case-assigning verbs are archaisms—does not hold up under closer scrutiny. He maintains, for instance, that the reason the dative case assigning verb *otomstit'* 'to avenge' can undergo passivization is because this verb once assigned an

accusative Case; thus, the passive is an archaism linked to the earlier case-assigning verb. The example he provides is repeated under (52) below.

- (52) Ty otomščěn vpolne, davno  
 you-NOM avenged-[+AGR] completely long-ago  
 a kem i kak— ne vse l' ravno?  
 but who-INSTR and how NEG all PARTICLE same  
 'You are avenged fully long ago,  
 But by whom and how—does it really matter?'  
 (Lermontov, cited in Fowler 1996a: 530)

Fowler states that since the only examples he uncovered of passivization with this verb are as old as the example above, 'it is reasonable to suggest that they represent the older variant of the verb's government' (Fowler 1996a: 531). Such a hypothesis cannot account for the perfectly natural use of the passive form of this verb in the modern language. That is, native speakers claimed that the following example is acceptable and natural in the modern language. These same speakers only accepted dative case marking on the verb's internal argument.

- (53) Ja nakonec vpolne otomščěn!  
 I-NOM finally fully avenged-[+AGR]  
 'I'm finally fully avenged!'

Examples like this and (51) above suggest that the dative case belongs to the generalization Fowler argues for, namely 'if the process exists, it is invariably preferable to assume the grammar allows for it.'<sup>27</sup> Furthermore, Fowler's hypothesis regarding the status of the dative in Russian does not extend to other Slavic languages. The lexical dative case-assigning verb *przeczyć/za~* 'to deny' in Polish, for instance, undergoes passivization, as the following example illustrates:<sup>28</sup>

- (54) Informacja nie była zaprzeczona.  
 Information-NOM NEG was denied-[+AGR]  
 'The information wasn't denied.'

Thus, I assume that lexical genitive, instrumental, and dative case-marked arguments are all created equal and leave open for further research the role of passivization in determining what Fowler refers to as direct object status.

<sup>27</sup> As noted by Fowler, not all transitive verbs undergo passivization in Russian, even if they select a so-called direct object with structural accusative Case marking, e.g. *znat'* + ACC 'to know' does not undergo passivization. There are a number of semantic and morphological constraints on passivization in Russian. See Fowler (1996a) and Zalaznjak (1977: 77) for some discussion of these constraints.

<sup>28</sup> I am grateful to Joanna Błaszczak for providing me with this example.



(58) *Genitive of negation:*

- a. \*Ja ne dal knigi/ knig nikakix (Russian)  
 I NEG gave books-ACC/ books-GEN any-GEN  
 studentov.  
 students-GEN  
 (intended interpretation) 'I didn't give the books to any students.'
- b. \*Nie dawałam książki/ książek profesorów. (Polish)  
 NEG gave books-ACC/ books-GEN professors-GEN  
 (intended interpretation) 'I didn't give the books to the professors.'

(59) *Quantifier phrases:*

- a. Dala jsem svou knihu pěti univerzitám/ (Czech)  
 gave AUX own book five-DAT universities-DAT/  
 \*univerzit.  
 \*universities-GEN  
 'I gave my book to five universities.'
- b. Poklonio sam svoju knjigu dvama univerzitetima/ (BCS)  
 gave AUX own book two-DAT universities-DAT/  
 \*univerziteteta.  
 \*universities-GEN  
 'I gave my book to two universities.'

Woolford (2006) also illustrates that lexical and inherent cases are in complementary distribution: lexical case marking may occur on themes, but not on external arguments or (shifted) DP goals, whereas inherent case may occur on external arguments and on (shifted) DP goals, but not on themes. One of the very rare exceptions to this generalization in the Slavic languages is the C/case marking patterns with the verb *teach*, based on the root *uč-*. In Belarusian and Russian the dative Case is assigned to the apparent direct object of this verb, whereas the accusative C/case is assigned to the indirect object, that is, to the goal/recipient, for example Russian *Ja učila ego-ACC anglijskomu jazyku-DAT* 'I taught him-ACC the English language-DAT'. This pattern, however, constitutes a historical relic, found also in Old Church Slavonic. That is, according to Dziwirek (2002: 321), the original meaning of teaching and learning in Slavic had to do with forming habits, conventions and traditions. Teaching someone meant accustoming them to something, that is, the person taught was originally perceived as a theme, whereas the object they were being accustomed to was

cannot occur in so-called distributive *po* constructions (*po* assigns the dative Case in Russian). An accusative (structural) Case-marked argument, on the contrary, can occur in the partitive (under appropriate conditions), and can occur with distributive *po*. See his work for further discussion.

perceived as a goal, hence the apparently anomalous Case-marking pattern in the modern languages. The other Slavic languages have moved away from this pattern, which may be due, as Dziwirek notes, to their strong association of the dative Case with human referents (an association that she claims is least strong in Russian and presumably also Belarusian). In Czech, Slovak, and BCS this verb now assigns a double accusative, and, according to Dziwirek, it is the only verb to do so in these languages, whereas in Polish and Ukrainian it assigns the accusative and genitive C/cases. I assume that this historical relic is insufficient to undermine the general cross-linguistic pattern discussed in Woolford 2006 that inherent case marking does not occur on themes and lexical case marking does not occur on goals in double object constructions.

I follow Woolford (2006) in the claim that non-structural cases divide into two distinct types: lexical and inherent, which differ in their behaviour and manner of licensing, that is, inherent cases are non-structural, since they fail syntactic tests for structural Case, but they do not constitute lexical cases because they are predictable. As noted by Woolford, this hypothesis takes into account the widespread observation that some instances of non-structural case are truly idiosyncratic, whereas others are regular and predictable (Blume 1998; Czepluch 1988; Holmberg and Platzack 1995; Jónsson 2003; Maling 2002; Wunderlich 1997; Yip et al. 1987; and Zaenen et al. 1985, among others). As Woolford points out, there is general consensus that the theory should capture this regularity in some way.

The question that naturally arises is how inherent case is licensed. A number of scholars have posited that indirect objects are not selected as an argument of the verb, but rather are merged within a so-called *APPLICATIVE PHRASE* (Anagnostopoulou 2003; Cuervo 2003; Marantz 1993; and Pylkkänen 2002, among many others). Cuervo (2003), working on datives in Spanish, states explicitly that this applicative phrase, not the verb, is responsible for licensing the dative argument both syntactically and semantically. The term applicative phrase is based on a related construction (traditionally referred to as the *APPLICATIVE CONSTRUCTION*) found in Bantu, Austronesian, and other language families (cf. Baker 1988b; and Marantz 1993, among others). The applicative in these languages resembles the double object construction in that it involves an oblique argument (a goal or beneficiary) which surfaces as an NP/DP along with the so-called direct object. Unlike the double object construction in English or the Slavic languages, however, the verb in the applicative construction in these languages combines with an affix, traditionally referred to as the applicative affix. The following examples illustrate this pattern in Chichewa:<sup>30</sup>

<sup>30</sup> SP stands for a subject agreement prefix.

- (60) Mbidzi    zi-na-perek-a                    msampha    kwa    nkhandwe.  
       zebras    SP-PAST-hand-ASP    trap            to        fox  
       'The zebras handed the trap to the fox.'
- (61) Mbidzi    zi-na-perek-er-a                    nkhandwe    msampha.  
       zebras    SP-PAST-hand-APPL-ASP    fox                trap  
       'The zebras handed the fox the trap.'
- (Baker 1988b: 229)

These examples demonstrate that in Chichewa an indirect object is selected in two ways: either with a preposition (example 60) or with an affixal head (an applicative) attached to the verb (example 61). Marantz (1993), among others, suggests that the double object construction in a language like English and the applicative construction in a language like Chichewa have the same underlying structure, that is, an applicative morpheme should be postulated for the double object construction in English also. The difference between the two languages is that this morpheme is overt in Chichewa, but covert in English. In much recent work on double object constructions this morpheme has been subsumed within an applicative phrase in the syntax.

One piece of structural evidence linguists have posited for the presence of an applicative phrase in the syntax in a variety of different languages is the inability for an argument dominated by an applicative phrase to c-command a depictive secondary predicate, in those languages in which c-command is a necessary requirement for depictive secondary predication (Pylkkänen 2002). Notice, for instance, that in English and Russian an indirect object cannot serve as an antecedent for an adjectival secondary predicate, whereas a direct object can:

- (62) I ate the meat<sub>i</sub> raw<sub>i</sub>.
- (63) \*I gave John<sub>i</sub> the book drunk<sub>i</sub>.
- (64) Ja    s"ela    mjaso<sub>i</sub>            syrym<sub>i</sub>.  
       I    ate       meat-ACC    raw-INSTR  
       'I ate the meat raw.'
- (65) \*Ja    dala    Ivanu<sub>i</sub>            knigi            p'jany<sub>i</sub>.<sup>31</sup>  
       I    gave    Ivan-DAT    books-ACC    drunk-INSTR

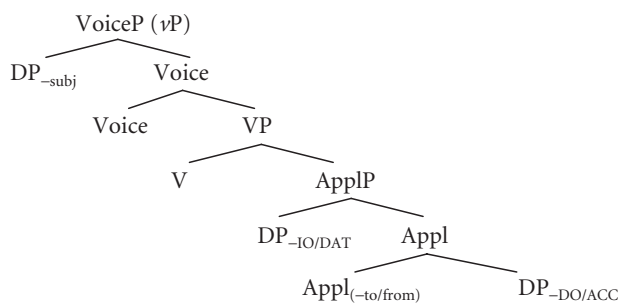
<sup>31</sup> Dative case agreement is possible on the adjective in this construction, but the resulting interpretation is that the adjective is an NP modifier/attribute or an appositive. See chapter 4 for further discussion.



Examples like these suggest that the indirect object is dominated by additional structure and therefore cannot c-command a secondary predicate (I return to this hypothesis in chapter 4, section 4.1).

Some have suggested that an applicative phrase is manifested as an additional layer within the extended verb phrase, e.g. a V-applicative level above VP, but below  $\nu$ P (Anagnostopoulou 2003; Marantz 1993; and Woolford 2006, among others). Others maintain that there are two different types of applicative constructions: high and low applicatives (Pylkkänen 2002). A high applicative selects a verb phrase (VP) as its complement, whereas a low applicative selects another NP/DP as its complement. The configuration under (66) below illustrates the structure Pylkkänen posits for low applicatives.

(66) *Low applicatives:*



For the time being, I leave open whether the applicative phrase is merged low in the Slavic languages, as in (66) above, or higher up (i.e. between VP and  $\nu$ P), as in Anagnostopoulou 2003, Marantz 1993, and Woolford 2006. What is crucial for our purposes is that there is sufficient evidence in the literature that indirect objects in a variety of languages, including the Slavic languages, are dominated by an additional layer of structure, which, following recent popular convention, I will refer to as an applicative phrase. I assume that this applicative phrase is responsible for licensing the dative case on indirect objects, not the verb itself. That is, this applicative phrase assigns a non-structural dative case that is semantically predictable. Like (non-accusative) cases assigned by prepositions in the Slavic languages,<sup>32</sup> this dative case assigned by the head of the applicative phrase cannot be overridden by structural Case mechanisms.

<sup>32</sup> See Babby 1980a and Franks 1994 for the claim that some prepositions assign a structural accusative Case, at least in Russian.

Scholars have posited the presence of an applicative phrase in constructions other than double object constructions. Cuervo (2003), for instance, maintains that so-called dative ‘subject’ experiencers in Spanish are also dominated by an applicative phrase which is responsible for licensing the dative argument both syntactically and semantically. In Spanish a clitic occurs in both dative double object and dative experiencer constructions. Cuervo claims that this clitic is the spell-out of the head of an applicative phrase. Examples (67) and (68) below illustrate this pattern in Spanish (CL stands for clitic).

- (67) Pablo le mandó un diccionario a Gabi.  
 Pablo CL-DAT sent a dictionary Gabi-DAT  
 ‘Pablo sent Gabi a dictionary.’  
 (Cuervo 2003: 16)
- (68) A Daniela no le gustan los gatos.  
 Daniela-DAT NEG CL-DAT like.PL the cats  
 ‘Daniela doesn’t like cats’ (lit. ‘To Daniela don’t appeal the cats’).  
 (Cuervo 2003: 17)

The Slavic languages also have dative ‘subject’ experiencer constructions, as the following examples illustrate:

- (69) Mne nravitsja èta kniga. (Russian)  
 I-DAT like-3rd.SG this book-NOM  
 ‘I like this book’ (lit. ‘This book is pleasing/agreeable to me’).
- (70) Nudzi mi się w szkole. (Polish)  
 bore-3rd.SG I-DAT REFL at school  
 ‘I’m bored at school’ (lit. ‘It bores me at school’).
- (71) Sviđa mi se ova haljina. (BCS)  
 like-3rd.SG I-DAT REFL this dress-NOM  
 ‘I like this dress’ (lit. ‘This dress is likeable/attractive to me’).

Like inherent case-marked dative indirect objects, the dative case in constructions like these is predictable—it is linked to an experiencer theta role, and it is non-structural, that is, it cannot be overridden by another C/case, as the following GN and genitive QP examples from Russian illustrate (the argument after the numbers five and above go into the genitive plural in Russian):

- (72) \*Studentov ne nravjatsja èti knigi. (GN)  
 Students-GEN NEG like-3rd.PL these books-NOM  
 (intended interpretation) ‘I don’t like books.’

- (73) Pjati studentam/ \*studentov ne nnavjatsja (GEN QP)  
 five-DAT students-DAT/ \*-GEN NEG like-3rd.PL  
 èti knigi.  
 these books-NOM  
 'Five students don't like these books.'

Example (72) illustrates that the GN is ungrammatical on the experiencer, despite the presence of negation. Example (73) shows that the genitive Case cannot be assigned within the QP with the numeral five (which is in the dative case), that is, the entire QP obligatorily occurs in the dative case.

Like dative indirect objects, the status of the case marking on dative experiencers has been controversial in the literature (for discussion, see Schoorlemmer 1995: 59–68). I follow Schoorlemmer in the claim that the dative case on experiencers in constructions like (69) in Russian above (and by extension in examples (70) and (71) in Polish and BCS) constitutes a non-structural case. More precisely, these datives, like dative indirect objects, constitute non-structural inherent case-marked arguments. In the spirit of Cuervo (2003), I assume dative experiencers in the Slavic languages, like Spanish, are also dominated by an additional layer of structure, that is, an applicative phrase, and this applicative phrase is responsible for licensing the dative argument both semantically and syntactically. Syntactic evidence for the presence of an applicative phrase in dative experiencer constructions also comes from depictive secondary predication facts. That is, like dative indirect objects, dative experiencers cannot c-command a depictive in Russian or Spanish, as the following examples illustrate (I return to this restriction in chapter 4 and show that it is not linked to dative case marking in general in the East Slavic languages):<sup>33</sup>

- (74) \*Mne<sub>i</sub> vse nadoedaet trezvm<sub>i</sub>. (Russian)  
 I-DAT everything bore-3rd.SG sober-INST  
 (intended reading) 'Everything bores me (when I'm) sober.'
- (75) \*A Montse<sub>i</sub> le gusta Guille borracha<sub>i</sub>. (Spanish)  
 Montse-DAT CL-DAT likes-3rd.SG Guille drunk  
 (intended reading) 'Montse likes Guille (when she's) drunk.'

The semantic and structural similarities between dative goals/beneficiaries and dative experiencers strongly support the hypothesis that they are both inherent cases merged within an applicative phrase.

<sup>33</sup> See Demonte 1988 for evidence that depictive secondary predication in Spanish is sensitive to a c-command constraint.

Cuervo (2003) posits the presence of an applicative phrase in a number of additional dative (clitic) constructions in Spanish. One such construction is relevant to a dative case-marking pattern in Czech, namely her directional ('from') transitive verbs which select a *SOURCE* argument in the dative case. The following examples illustrate these types of dative case-assigning verbs in Spanish and Czech:

(76) *Directional ('from') transitive verbs (+SOURCE) in Spanish:*

Pablo le sacó la bicicleta a Andreína.  
 Pablo DAT-CL took-away the bicycle Andreína-DAT  
 'Pablo took the bicycle from Andreína.' (lit. 'Pablo took away Andreína the bicycle.')  
 (Cuervo 2003: 16–17)

(77) *Directional ('from') transitive verbs (+SOURCE) in Czech:*

- a. Ukradl mému kamarádovi padesát korun.  
 stole my-DAT friend-DAT fifty crowns-ACC  
 'He stole fifty crowns from my friend.' (lit. 'He stole my friend fifty crowns.')
  - b. Vzal mu také pas a peněženku.  
 took he-DAT also passport-ACC and wallet-ACC  
 'He also took from him his passport and wallet.' (lit. 'He also took him passport and wallet.')
- (Naughton 2005: 198–9)

This dative case-marking pattern also falls into the inherent dative case-marking patterns discussed above: it is predictable and it cannot be overridden by structural Case assignment. I therefore assume that the dative case with these 'directional (from) verbs' in Czech also constitutes an inherent case, not a lexical one. I follow Cuervo's basic hypothesis and assume that Czech directional ('from') verbs, like Spanish, can merge with an applicative phrase as part of their argument structure, which in turn merges with a *SOURCE* argument and assigns that argument the dative case (see Cuervo's analysis for further discussion).

There is one final dative (clitic) construction in Cuervo 2003 that warrants mention, namely the dative case that occurs on the object with certain two-place verbs such as *SMILE*, e.g.:<sup>34</sup>

<sup>34</sup> Cuervo's analysis of applicatives also includes what she terms *UNACCUSATIVE EXISTENTIALS*, such as Spanish *faltar* 'lack, miss', e.g.:

- (78) Juanita les sonrió a todos los invitados.  
 Juanita DAT-CL.PL smiled all the guests-DAT  
 'Juanita smiled at all the guests.'  
 (Cuervo 2003: 160)

Notice that in this construction the single object occurs in the dative case and a dative clitic arises, which, as noted above, Cuervo claims is the spell-out of the head of an applicative phrase in Spanish. As Cuervo (2003: 163) points out, this construction does not mean that Juanita did some smiling for the guests, but rather that the guests received a smile from her. Cuervo states that this same meaning can be expressed in Spanish by a light verb combined with a direct object, for instance a light verb combined with the object *una sonrisa* 'a smile':

- (79) Juanita les hizo una sonrisa a todos los invitados.  
 Juanita CL-DAT.PL made a smile all the guests-DAT  
 'Juanita smiled at all the guests.'  
 (Cuervo 2003: 160–1)

The argument *una sonrisa* in this light verb construction is a direct object. The dative case occurs on the indirect object (*todos los invitados* 'all the guests') in this example, as it does in example (78) above. Furthermore, in both these examples the interpretation of the dative arguments is the same. The dative clitic also arises in this example (as the spell-out of the head of *ApplicP*), as it does in example (78). As a result of these patterns, Cuervo claims that a construction like (78) above, like its light verb equivalent, actually constitutes a type of double object construction, that is, the dative objects in both (78) and (79) are dominated by an applicative phrase.

The Slavic languages also have verbs that behave in a similar manner to SMILE in Spanish, for instance Russian *ulybat'sja/ulybnut'sja komu-nibud'*-DAT 'to smile at someone'. I assume that Cuervo's analysis of these types of verbs in Spanish can be extended straightforwardly to the Slavic languages. The hypothesis that the dative argument with some two-place verbs in the Slavic languages is equivalent to an indirect object is not new. A number of scholars have suggested that the specification of the direct object by some

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i. A Laura le falta la birome de Pablo.  
 Laura-DAT CL lacks the pen of Pablo  
 'Laura is missing Pablo's pen.'  
 (Cuervo 2003: 143)

Some of the Slavic languages also have this type of applicative construction. See Cuervo's analysis for evidence that these datives are also merged within a type of applicative phrase.

verbs is sufficient to make the actual manifestation of this object unnecessary, or at least optional (e.g. Janda 1993a: 63–7; and Pereltsvaig 2001: 228–9). Pereltsvaig, for instance, states that ‘many dative-complement verbs (and only such verbs) can be paraphrased by a combination of a ditransitive verb and a noun corresponding to the root of the dative-selecting verb’ (Pereltsvaig 2001: 228). In Russian, for instance, the verb *doverjat’* + DAT ‘trust’ can be paraphrased with the ditransitive verb *okazat’ doverie*-ACC + DAT ‘to render trust’. Similarly, *navredit’* + DAT ‘to harm’ and *pomogat’* + DAT ‘to help’ can be paraphrased with the ditransitives *nanesti vred*-ACC + DAT ‘to bring harm’ and *okazat’ pomošč’*-ACC + DAT ‘to render help’, respectively. In BCS a verb like *help* takes the dative case when help is given to someone, but the accusative case when the verb merges with an inanimate internal argument and cannot be paraphrased as ‘to render help to someone’, e.g.: *pomoći prijatelju*-DAT ‘to help a friend’ (render help to a friend), but *pomoći zavrsetak*-ACC *gradnje* ‘to help finishing construction’ (\*to render help to the finishing of construction). Like Spanish, the interpretation of the dative argument in all these constructions is constant, as the following examples suggest for the verb *pomogat’* ‘to help’ in Russian:

- (80) Krasnyj Krest pomogaet postradavšim ot zemletrjasenija.  
 red cross-NOM helps victims-DAT of earthquake-GEN  
 ‘The Red Cross helps earthquake victims.’
- (81) Krasnyj Krest okazyvaet pomošč’ postradavšim ot  
 red cross-NOM renders help-ACC victims-DAT of  
 zemletrjasenija.  
 earthquake  
 ‘The Red Cross renders help to earthquake victims.’  
 (Pereltsvaig 2001: 229)

In both of these examples the dative argument is the goal/beneficiary of the eventuality denoted by the verb phrase. Patterns like these support the hypothesis that the dative goal/beneficiary with some two-place verbs constitutes a type of indirect object, that is, it is dominated by an applicative phrase. In the appendix at the end of this book, which lists lexical case-assigning verbs in each of the Slavic languages, I have included a subsection for each language entitled ‘dative indirect objects’ and have listed some representative dative case-assigning verbs in this section that I assume constitute ditransitives. In the spirit of Cuervo (2003), Janda (1993a), and Pereltsvaig (2001), I assume that these dative case-marked arguments constitute instances of inherent case marking, not lexical case marking.

The pattern that should be crystal clear at this stage is that lexical cases are distinct from both structural and inherent C/cases. Like inherent cases they take precedence over syntactic structural Case, but unlike inherent cases they are unpredictable (at least in terms of the semantics of the verb with which they merge and the semantics of the NP itself, e.g. its theta role). The following section addresses a potential fourth category of predictable case, so-called SEMANTIC case.

### 3.3 Semantic Case

As noted in chapter 1, it has been suggested that so-called SEMANTIC cases exist in language. Babby and Freidin (1984) and Babby (1986), for instance, claim that when the interpretation of a particular case is directly related to its morphological form, that morphological form constitutes a semantic case. For them, semantic case includes the genitive of negation and partitive genitive in Russian. It would also include the instrumental case assigned to an NP in constructions like (82) below (the NP in this construction receives an adverbial interpretation).

- (82) On idet lesom. (Russian)  
 he walks forest-INSTR  
 'He is walking/walks by way of the woods'

According to Babby and Freidin (1984) and Babby (1986), semantic cases can be distinguished from other cases based on the following two criteria: they contribute to the overall semantic interpretation of a sentence; and, if they alternate, they alternate with structural Case-marked arguments, not lexical ones. They do not claim that all languages have semantic case (English, for instance, does not), but rather they suggest that the theory needs to allow for the existence of such a phenomenon.

Numerous analyses now exist which link the genitive of negation and the partitive genitive to structural Case marking, that is, Cases assigned in the syntax.<sup>35</sup> However, the insight that certain C/case alternations are associated with a particular interpretation and that these C/cases do not constitute lexical cases is an important one. My goal in this section is to outline some additional C/case-marking patterns in the Slavic languages that I assume do not constitute instances of lexical case assignment. All of the C/case-marking patterns and alternations discussed in this section are linked to predictable

<sup>35</sup> On the genitive of negation see, for instance, Babyonyshev (1996), Bailyn (1997), Brown (1999), and Harves (2002a, 2002b), among many others. On the partitive genitive, see Bailyn 2004 and references therein.

contrasts, hence their status as non-lexical cases, although the exact nature of the semantic features driving these alternations are not fully understood for some of the constructions I present. I assume that the following patterns can be accounted for in the syntax, that is, they are linked to various functional categories and features. The exact syntactic mechanisms responsible for the C/case forms in the examples that follow, however, fall beyond the scope of this book. The purpose of this section is purely to remove a number of patterns that could potentially be confused with lexical case marking in order to eliminate any potential confusion in future chapters. What distinguishes most of the C/case-marking patterns discussed below from lexical case is that a choice exists between two different case forms and this choice is predictable. Lexical cases, on the contrary, as discussed in section 3.1, are obligatory and unpredictable (at least in terms of the semantics of a verb).

There are a number of C/case-marking alternations in the Slavic languages linked to semantic features, such as animacy, definiteness, or to features like abstract versus concrete. In Belarusian, Russian, and Ukrainian, for instance, there is an alternation between the accusative and genitive C/case on the internal arguments of some verbs, depending on whether an argument denotes a general or abstract concept (genitive) or whether it denotes persons or specific inanimate objects (accusative).<sup>36</sup> Such verbs include, for instance, Belarusian *zapytac* ‘to ask’, *čakac* ‘to wait’, *patrabavac* ‘to require/demand’, Russian *ždat* ‘to wait for’, *iskat* ‘to seek, look for’, *prosit* ‘to ask’, *trebovat* ‘po~ ‘to demand, request, require’, *xotet*’/za~ ‘to want, desire’, and Ukrainian *xotity* ‘to want, desire’, and *žadaty* ‘to want, desire’, among others. The following examples from Russian illustrate this distinction with the verb *xotet* ‘to want’:

- (83) Ja        xoču    mira.  
       I-NOM   want    peace-GEN  
       ‘I want peace.’

- (84) Ja        xoču    bulku.  
       I-NOM   want    roll-ACC  
       ‘I want a bread roll.’

The internal argument *mir* ‘peace’ in example (83) is perceived as more abstract and can therefore occur in the genitive C/case with the verb *xotet*, whereas *bulka* ‘bread roll’ in example (84) is perceived as more concrete, hence its accusative Case marking. Crucially, that there is a choice between the accusative or genitive C/case with verbs like these means that the genitive

<sup>36</sup> Neidle (1988) claims this use of the genitive Case in Russian is linked to the genitive of negation. See her analysis for details.



C/case is not a lexical one, since lexical cases are obligatory and can never be overridden or replaced by another C/case with the same verb. Furthermore, lexical cases are unpredictable, whereas this pattern is predictable.

Ukrainian has an accusative–genitive alternation with inanimate masculine nouns that have a so-called SPECIFIC–OBJECTIVE (*konkretno–predmetnym*) meaning (Pugh and Press 1999). This includes the alternation in examples like the following:

- (85) *napysaty lyst/ lysta*  
 to-write letter-ACC/ letter-GEN  
 ‘to write a/the letter.’

The genitive C/case in this example is not obligatory and it is linked to the meaning of the NP; thus, it does not constitute an instance of lexical case assignment.

Slovak also exhibits an accusative–dative alternation with a number of verbs, whereby the dative argument is said to convey ‘a beneficial or advantageous nuance’ (Oravec 1967: 149). Verbs like *rozumiet* ‘to understand’, for example, merge with internal arguments that participate in this alternation.<sup>37</sup> Again, the dative C/case with these verbs is not obligatory and appears to be predictable; thus, it does not constitute a lexical case.

There is also an accusative–instrumental alternation in a number of Slavic languages, whereby the instrumental C/case occurs when the verb refers to movement of a body part of the subject or an immediate extension of the subject’s body, whereas the accusative Case occurs elsewhere. The following examples illustrate this alternation in Russian.

- (86) *Ja dvigal loktjami v boka.*  
 I-NOM moved elbows-INSTR in side  
 ‘I moved my elbows into people’s sides.’
- (87) *Kto-to stal pljasat’, dvigali s šumom mebel’.*  
 someone started to-dance moved with noise furniture-ACC  
 ‘Some started to dance, they moved the furniture noisily.’  
 (Timberlake 2003: 335)

Notice that in example (86) the internal argument *loktjami* ‘elbows’ is in the instrumental C/case with the verb *dvigat* ‘to move’, whereas in example (87) the argument *mebel’* ‘furniture’ is in the accusative Case with the same verb. Again, the instrumental C/case is not obligatory with the verb *dvigat* ‘to

<sup>37</sup> See Oravec (1967: 149) for a list of verbs that participate in this alternation.

move' and this accusative-instrumental C/case-marking alternation is predictable; thus, the instrumental case on the argument in example (86) does not constitute a lexical case.

Finally, I assume that any C/case-marking alternations based on animacy or virility in the Slavic languages do not constitute lexical cases (e.g. the verb *čekaty* 'to wait' in Ukrainian takes a genitive C/case-marked argument only if that argument is inanimate).

As noted previously, semantic case also includes certain predictable uses of a given case form, even when this case does not alternate with another. It would include, for instance, the adverbial instrumental in an example like (82) above (*On idet lesom-INSTR* 'He walks by way of the woods'). The instrumental C/case-marked nominal in this example cannot be replaced, for instance, with an accusative one. This instrumental C/case marking, however, is fully predictable in this context, hence its status as a non-lexical C/case. There are numerous other predictable uses of the instrumental C/case in the Slavic languages, which, I assume, in the spirit of Babby and Freidin (1984) and Babby (1986), do not constitute lexical cases. These include, for example, the use of the instrumental to denote the instrument of an action (e.g. Russian *pisat'* *karandašom-INSTR* 'to write with a pencil'), the instrumental of movement (e.g. Czech *mávat rukou-INSTR* 'to wave one's hand'), the instrumental to denote 'with/by means of' (e.g. Russian *torgovat'* + INSTR 'to trade' ('with/by means of')<sup>38</sup> and *stradat'* + INSTR 'to suffer (chronically with)'<sup>39</sup>), and the instrumental with verbs of scent or smell, such as Slovak *voňat'* (*fialkami-INSTR*) 'to smell (of violets)', Russian *dyšat'* 'to breathe', *paxnut'* 'to smell (of something)', and BCS *vonjati*, *zaudarati*, and *mirisati* 'to smell (of something)', among others. I assume that the predictable use of the instrumental C/case also includes the so-called predicate instrumental that occurs on the predicate complement with a number of verbs across the Slavic languages (often within a so-called small clause complement), for instance verbs like *consider* (Belarusian *ličyć* + ACC + INSTR, Russian *sčitat'* + ACC + INSTR, and BCS *smatrati* + ACC + INSTR) and *become* (Belarusian *stanavicca/stac'* + INSTR, Russian *stanovit'sja/stat'* + INSTR, Ukrainian *stavaty/staty* + INSTR, Czech *stát se* + INSTR, and Slovak

<sup>38</sup> Fowler (1996a: 535) suggests that the verb *torgovat'* 'to trade' is an intransitive verb and that any instrumental argument associated with it is a circumstantial adjunct. Mrázek (1964: 183) treats verbs like *torgovat'* 'to trade (with)', *zanimat'sja* '(lit.) to occupy oneself with', and *xvastat'* 'to boast (with/by means of)' as equivalent to a verb phrase like *igrat'* + INSTR 'to play with'.

<sup>39</sup> Mrázek (1964) categorizes verbs like Russian *stradat'* 'to suffer (with)', *skučat'* 'to be bored (with)', and *mučit'sja* 'to be racked with (e.g. with pain)' as the *tvoritel'nyj pričiny* '(roughly) the instrumental to denote the reason for an action'.

*stávat sa/stat' sa* + INSTR).<sup>40</sup> In fact Wierzbicka (1980) lists some seventeen predictable uses of the instrumental C/case in Russian, including, to use her terminology: instrumental objects in action sentences (e.g. *Ivan švyrjal kamn-jami*-INSTR 'Ivan was throwing "with" stones'); the instrumental of matter in process sentences (e.g. *Ivan xarkal krov'ju*-INSTR 'Ivan was spitting "with" blood'); and the instrumental of manner (e.g. *Ona plakala gor'kimi slezami*-INSTR 'She was weeping "with" bitter tears'), among others. I do not include any predictable uses of the instrumental C/case, such as those outlined above or in Wierzbicka, under the category of lexical case.<sup>41</sup>

All of the C/case-marking patterns and alternations outlined in this section are predictable. Furthermore, wherever an alternation exists, the alternating genitive, dative, or instrumental C/case-marked argument is not obligatorily selected by the verb. None of these patterns and alternations (among others) therefore constitute examples of true lexical case marking. As mentioned above, I will not address the nature of C/case-marking alternations which appear to be linked to semantic features any further in this book, since my goal is to account for the alternation between structural accusative Case versus true lexical case marking.

<sup>40</sup> Crucially, as will become clear in chapters 4 and 5, I do not assume that all NP/AP predicates are assigned the instrumental Case within a so-called predicate phrase (PredP), contra Bailyn and Rubin (1991) and Bailyn (1995a). If all predicates were assigned the instrumental Case by a PredP, we might expect secondary predicates in BCS to occur in the instrumental, since predicate complements with verbs like *smatrati* 'to consider' occur in the instrumental C/case. Secondary predicates in BCS, however, agree in C/case with their antecedent, as example (i) below illustrates. Furthermore, we might also expect the instrumental Case to be obligatory on a secondary predicate in the East Slavic languages, yet both Case agreement and instrumental Case marking are often possible on a secondary predicate in Belarusian, Russian, and Ukrainian, as example (ii) illustrates for Russian (I discuss secondary predication in the East Slavic languages in detail in chapter 4).

- |     |                                       |         |                  |         |                         |                      |       |
|-----|---------------------------------------|---------|------------------|---------|-------------------------|----------------------|-------|
| i.  | Prijatelji                            | su      | ga               | doveli  | pijanog /               | *pijanim             | kući. |
|     | friends-NOM                           | AUX     | him-ACC          | brought | drunk-ACC/              | *drunk-INSTR         | home  |
|     | 'His friends brought him home drunk.' |         |                  |         |                         |                      |       |
|     |                                       |         |                  |         |                         |                      |       |
| ii. | Druž'ja                               | priveli | ego <sub>i</sub> | domoj   | p'janogo <sub>i</sub> / | p'janym <sub>+</sub> |       |
|     | Friends-NOM                           | brought | him-ACC          | home    | drunk-ACC/              | drunk-INSTR          |       |
|     | 'His friends brought him home drunk.' |         |                  |         |                         |                      |       |

Thus, while I assume, following many other scholars, that instrumental case marking is predictable on a predicate complement with certain verbs across the Slavic languages, I do not assume that all predicates are dominated by an instrumental Case valuing/assigning PredP. For the time being, I leave open the possibility that certain verbs predictably merge with a type of PredP complement (which often constitutes a small clause complement) which in turn values or assigns the instrumental C/case. Crucially, this instrumental C/case marking is predictable on a predicate complement with a subset of verbs across a number of Slavic languages.

<sup>41</sup> I do, however, include Wierzbicka's INSTRUMENTAL OF EMOTIONS under lexical case assignment (e.g. Russian *gordit'sja* + INSTR 'to be proud'), as is evident in the appendix at the end of this book. The analysis in chapter 3 would not be significantly affected if it could be shown unambiguously that this is a predictable class of instrumental case-assigning verbs in Russian.

### 3.4 *Default case*

As mentioned in chapter 1, in the absence of structural, lexical, inherent, or so-called semantic *C/case* assignment (or valuing), many syntacticians assume that a default case is possible in the syntax (Marantz 1992 and Schütze 2001, among many others). Default cases, by their very nature, arise as a last resort in the syntax, preventing a derivation from crashing because an NP/DP, for instance, has not valued its Case. There is some disagreement among scholars as to which cases constitute the default cases in a given language. Many claim that the nominative case is a default case in Russian. Some have suggested that different default cases are assigned to different structural locations, that is, there is more than one default case in a given language. Richardson (2003a), for example, claims that in Russian the dative case is the default (or unmarked) case assigned to an external argument in spec,  $\nu$ P, whereas the accusative is the default (or unmarked) case assigned to an internal argument within the VP. Pereltsvaig (2000, 2001) suggests that the nominative case is a default case in Russian, but that the accusative case is the default on internal arguments. Franks (1995) also suggests that the accusative case is a default case, claiming that it is the 'least marked case' in Russian, that is, it is 'the case assigned by a verb (or preposition) in the absence of feature specifications' (Franks 1995: 53). In the ensuing chapters, I will claim that structural Cases are directly linked to the featural composition of relevant functional categories. I assume, however, that if a functional category associated with a particular structural Case is absent or defective in some way, a default case strategy is possible to save a derivation. In the spirit of Richardson (2003a), I assume that more than one default case can exist in a language, that is, different default cases are associated with different structural locations (and correspondingly functional categories). This point will become clear in the following chapters.

## 4. Conclusion

The distinction between structural accusative Case and (true) lexical case is crucial in chapter 3 of this book and the distinction between lexical and grammatical aspect is crucial in chapters 3, 4, and 5. In chapter 3, for instance, I link the accusative versus lexical *C/case*-marking opposition in the Slavic languages to lexical aspect, whereas in chapters 4 and 5, I link the instrumental versus Case agreement alternation on predicates in the East Slavic languages to grammatical aspect. The goal of this chapter therefore was to demonstrate that lexical and grammatical aspect are distinct phenomena in the Slavic languages, and to clarify the nature of structural versus true lexical *C/case* marking to avoid any potential confusion in the ensuing chapters.

# Case Marking on the Internal Argument and Lexical Aspect

## 1. Introduction

As mentioned in chapter 2, there is a popular hypothesis in much of the current syntactic literature that the accusative Case in language is linked to the object phi-features on the verb and this hypothesis has gained acceptance among a number of scholars working on Slavic syntax (e.g. Harves 2002b, 2006; Lavine and Freiden 2002; and M. Richards 2005, among others). In this chapter I will suggest that object phi-features should be eliminated from the syntax of accusative Case valuing in most of the Slavic languages. While it is true that some languages exhibit verbal morphology linked to the phi-features on their objects—which appears to have been the impetus for the generalization that the accusative Case is linked to object phi-feature valuing in all languages—there is no morphological evidence in the Slavic languages that verbs carry object phi-features. Instead, verbs in the Slavic languages generally exhibit morphology linked to the phi-features of the external argument. Thus, while the link between object phi-features and the accusative Case (or structural Case in general) on internal arguments finds strong support in some languages, there is arguably little support for such a link in the Slavic languages. This leads us to wonder whether there are other phenomena in the Slavic languages that could plausibly play a role in the syntax of Case, that is, patterns for which there is clear evidence in the grammar. Many languages exhibit Case-marking patterns that are linked to features of the grammar such as tense and aspect. It is well known, for instance, that Case-marking patterns in a number of ergative-absolutive languages are dependent on the tense or aspect of the verb. Links between Case and aspect have also been posited in Finnish (Itkonen 1976; Kiparsky 1998; and Kratzer 2004, among many others), Classical Greek, Latin, Hebrew (Arad 1998), Bengali and Scottish Gaelic

(Ramchand 1997), Spanish (Torrego 1998), and Icelandic (Svenonius 2001), among others. Thus, while object phi-features might present a plausible explanation for the syntax of structural Case on an internal argument in some languages, it seems just as plausible that Case in other languages, including the accusative Case in some nominative–accusative languages, might be linked to the valuing of aspectual features. In this chapter I will suggest that the accusative Case in many of the Slavic languages can be linked to a pattern for which there is evidence in their grammars, namely semantic aspectual phenomena. In particular, I will illustrate that accusative Case marking on an internal argument in Belarusian, Russian, Ukrainian, Czech, Slovak, Polish, and Bosnian/Croatian/Serbian (BCS) is linked to the compositional event structure of, what I will refer to as, a *BASE* verb, that is, to whether the telicity or atelicity of a verb phrase is affected by elements such as an internal argument or a lexical prefix (to be defined shortly).<sup>1</sup>

Other scholars have linked Case and aspect in Russian (Babko-Malaya 1999; Borer 2005a; Pereltsvaig 2000, 2001; and Richardson 2003a, 2003b). In general, however, these scholars have focused on the link between accusative Case marking and telicity (Borer 2005a; Richardson 2003a, 2003b; and, to a certain extent, Babko-Malaya 1999), or so-called boundedness and the role of an argument as a ‘situation delimiter’ (Pereltsvaig 2000, 2001). Such hypotheses face the problem that most accusative Case marking in Russian, and the Slavic languages in general, cannot be linked to telicity/boundedness, or the role of an argument as a situation delimiter. There are many atelic verb phrases, for instance, that merge with accusative Case-marked arguments, and there are many accusative Case-marked internal arguments that do not merge with bounded verbs and do not function as situation delimiters. This dilemma is removed in an account that links accusative Case marking to the compositional event structure of a (base) verb, as will become clear shortly.

In fact, by turning our attention to the role of lexical aspect in structural Case assignment, we are able to find a solution to one of the most puzzling C/case marking phenomena in the Slavic languages, namely the alternation between accusative versus lexical C/case marking on the internal argument of

<sup>1</sup> I do not include Bulgarian and Macedonian in my analysis, since they do not have rich morphological case systems, although they do exhibit a historical relic of the accusative versus lexical C/case-marking alternation on their clitics. That is, some verbs arguably take a lexical dative clitic, e.g. Bulgarian *vlijaja* and *dejstvam* ‘to influence’, and *preča/po~* ‘to bother, hinder’, among others. I also do not include Slovene in the following analysis, as it has very few verbs that take lexical case-marked arguments. An analysis of structural Case based on object phi-features might therefore be more plausible for a language like Slovene in which a link between Case and lexical aspect is very weak. Upper and Lower Sorbian and Kashubian are not included due to my lack of access to native speakers of these languages.

two-place predicates. In this chapter, I will illustrate that this alternation is directly linked to event structure facts. In particular, I will demonstrate that lexical case-marked arguments, unlike accusative ones, always occur with atelic two-place base verbs and never merge with a base verb whose event structure is compositional.

To follow the discussion of the compositional nature of event structure in the Slavic languages in this chapter, it is necessary to understand what I mean when I refer to a base verb. The following section (section 2) therefore outlines my assumptions about the syntactic structure of a verb. In section 3, I address the role of an internal argument and (lexical) prefixation in the event structure of a verb phrase and the link between the accusative Case and the compositional event structure of a verb. In section 4, I provide a syntactic account of the link between the accusative Case and event structure facts. In section 5, I address one type of construction in which the accusative Case does not obligatorily occur in all the Slavic languages, despite the presence of an internal argument and a base verb whose event structure is compositional—unaccusative constructions. I show that this construction is not problematic for the analysis presented in this chapter. Finally, section 6 constitutes the conclusion.

## **2. Base verbs and syntactic prefixation**

In order to understand much of the discussion of the compositional nature of event structure in this chapter, some preliminary remarks are necessary about my assumptions regarding the structure of a verb and its interaction with different types of prefixes in the Slavic languages. As mentioned above, the crucial pattern I focus on in this chapter is the link between the compositional event structure of what I refer to as a *BASE* verb, and accusative Case marking. For my purposes, a base verb is essentially a verb stripped of any prefixes. It is common knowledge that verbs in the Slavic languages, for instance, can occur with a variety of different prefixes. These prefixes are often given three different labels, depending on the way they interact with a given verb: purely perfectivizing, superlexical, and lexical prefixes.<sup>2</sup> The differences between these prefixes are important, since they interact with the lexical aspect of the verb in different ways, and, as I will show shortly, this interaction is linked to the accusative versus lexical C/case-marking dichotomy on an internal argument in the Slavic languages.

<sup>2</sup> These three classes of prefixes are controversial. See Isačenko (1960), for instance, for the claim that so-called purely perfectivizing prefixes do not exist.

Purely perfectivizing and superlexical prefixes do not change the basic meaning of the base verb. As discussed extensively in chapter 2, purely perfectivizing prefixes bound the action described by the verb in time, but they do not affect the lexical aspect (i.e. the telicity or atelicity) of the verb. Superlexical prefixes differ from purely perfectivizing prefixes in that they add additional information about the action denoted by the verb—often with respect to time or intensity—but, like purely perfectivizing prefixes, they do not affect the lexical aspect of the verb. In effect, superlexical prefixes behave much like adverbs in that they modify the action described by the verb, but they do not change the fundamental meaning of the verb itself. Lexical prefixes, on the contrary, can affect the lexical aspect of the base verb. They also often contribute directional or idiosyncratic meanings to the verb. The following examples illustrate the contrasts between these three types of prefixes in Russian, Polish, and BCS.

- (1) *Purely perfectivizing prefixes:*
- |    |                      |               |                       |               |           |
|----|----------------------|---------------|-----------------------|---------------|-----------|
| a. | <i>stroit'</i> -IMPF | 'to build'    | <i>po-stroit'</i> -PF | 'to build'    | (Russian) |
| b. | <i>robić</i> -IMPF   | 'to do, make' | <i>z-robić</i> -PF    | 'to do, make' | (Polish)  |
| c. | <i>praviti</i> -IMPF | 'to make'     | <i>na-praviti</i> -PF | 'to make'     | (BCS)     |
- (2) *Superlexical prefixes:*
- |    |                       |            |                        |                                          |           |
|----|-----------------------|------------|------------------------|------------------------------------------|-----------|
| a. | <i>rabotat'</i> -IMPF | 'to work'  | <i>za-rabotat'</i> -PF | 'to begin to work'<br>(inceptive)        | (Russian) |
| b. | <i>czytać</i> -IMPF   | 'to read'  | <i>po-czytać</i> -PF   | 'to (have a) read<br>(of something)'     | (Polish)  |
| c. | <i>igrati</i> -IMPF   | 'to dance' | <i>po-igrati</i> -PF   | 'to dance for a while'<br>(delimitative) | (BCS)     |
- (3) *Lexical prefixes:*
- |    |                    |                   |                       |                                              |           |
|----|--------------------|-------------------|-----------------------|----------------------------------------------|-----------|
| a. | <i>bit'</i> -IMPF  | 'to hit,<br>beat' | <i>pere-bit'</i> -PF  | 'to interfere' (literally<br>'across-beat')  | (Russian) |
| b. | <i>pisać</i> -IMPF | 'to write'        | <i>przy-pisać</i> -PF | 'to attribute,<br>ascribe/assign'            | (Polish)  |
| c. | <i>jesti</i> -IMPF | 'to eat'          | <i>pro-jesti</i> -PF  | 'to corrode' (literally<br>'to eat through') | (BCS)     |

The purely perfectivizing prefixes under example (1) do not affect the meaning of the base verb, instead they serve to bound the action denoted by the verb in time. Notice that the superlexical prefixes under example (2), on the contrary, add additional meanings to the base verb. They can shift the focus of the action to the initiation stage, for instance, as in Russian *za-rabotat'* 'to begin to work'. This shift in focus, however, does not provide an inherent natural endpoint for this eventuality,



that is, the verb phrase remains atelic.<sup>3</sup> The lexical prefixes under example (3) can significantly affect the meaning of the base verb, changing a verb like Russian *bit* 'to beat' to *pere-bit* 'to interfere'. This type of prefix plays the most crucial role in the discussion of the interaction between C/case and aspect in this chapter, since lexical prefixes also readily affect the event structure of the verb phrase, as discussed in Babko-Malaya 1999 and Ramchand 2004. Notice, for instance, that in Russian the atelic verb *letet* 'to fly' becomes telic with the addition of the lexical prefix *pere-*, as is illustrated by the grammaticality of the following construction with the 'in X time' adverbial:

- (4) *Samolet pere-letel granicu za čas.*  
 airplane-NOM across-fly-PF border-ACC in hour  
 'The airplane crossed the border in an hour.'  
 (Ramchand 2004: 16)

The relevance of the effect of lexical prefixes on the event structure of a verb phrase will be discussed in detail below.<sup>4</sup>

A further oft-cited example of the differences between the three types of prefixes is the productive derivation of so-called secondary imperfectives with lexically prefixed verbs versus the restriction of secondary imperfectivization when a verb occurs with a superlexical prefix, and its virtual absence when

<sup>3</sup> The verb *za-robotat* 'to begin to work' is grammatical with the 'in X time' adverbial, as example (i) below illustrates:

- i. *Kompjuter za-rabotal za čas.*  
 computer-NOM started-work-PF in hour  
 'The computer started working in an hour (i.e. after an hour had passed the computer began to work).'

The 'in X time' adverbial in a construction like this, however, measures the duration of the so-called preparatory stage (Kamp and Reyle 1993) of the eventuality, it does not measure the time taken for the inherent endpoint of the eventuality to be reached. As noted by Ramchand, 'rather than measuring of the run time of the event, it [the inceptive prefix] measures the time between the onset of the initiational subevent to the onset of the V process' (Ramchand 2004: 28). That is, an inherent endpoint is absent with verbs like these; therefore, they are atelic.

<sup>4</sup> In general, where in English a PP or resultative adjective affects the event structure of a verb phrase, in the Slavic languages a lexical prefix performs this function. Notice, for instance, that in the following constructions the lexical prefix performs the same function that a resultative adjective would perform in English:

- i. *Vorota za-krylis.*  
 gate-NOM shut-PF  
 'The gate swung shut.'
- ii. *On vy-ter pol načisto.*  
 he-NOM wiped-PF floor-ACC clean-ADVERB  
 'He wiped the floor clean.'

a verb occurs with a purely perfectivizing prefix,<sup>5</sup> for instance, Russian *pere-bivat'*-2ary IMPF/*pere-bit'*-PF 'to interfere' (lexically prefixed verb) versus \**po-gulivat'*-2ary IMPF/*po-guljat'*-PF 'to walk for a while' (verb with a superlexical prefix). Examples like *pere-bivat'*-2ary IMPF/*pere-bit'*-PF 'to interfere' make it clear that, unlike purely perfectivizing prefixes, lexical prefixes have nothing to do with the grammatical aspect of the verb; both imperfective and perfective verbs, for instance, occur with the lexical prefix *pere-*. It is important to note, however, that the link between secondary imperfectivization and lexically prefixed verbs does not hold in all the Slavic languages. In Bulgarian, for instance, almost all perfective verbs can form derived secondary imperfectives, and in Polish, verbs with the superlexical inceptive prefix *za-* allow the formation of a secondary imperfective. Furthermore, this pattern represents a general tendency in those languages in which it does hold. There are (admittedly rare) examples of perfective verbs with superlexical prefixes that also have a derived secondary imperfective counterpart, for instance Russian *po-pisat'*/*po-pisyvat'* 'to write for a while/to do a bit of writing' and *po-mešat'*/*po-mešivat'* 'to stir for a while'. There are also examples of perfective verbs with lexical prefixes that do not have a derived secondary imperfective, for instance Ukrainian *pere-ljubyty*-PF 'to cease to love'. The prefix *pere-* with the verb *ljubyty* 'to love' in Ukrainian constitutes a lexical prefix, since it affects the event structure of the base verb, that is, it turns the atelic verb *ljubyty* 'to love' into a telic one, yet, contrary to expectation, this verb does not have a secondary imperfective counterpart.

As a sidenote, I refer to prefixes which explicitly state that an eventuality has an endpoint, like *pere-* in Ukrainian *pere-ljubyty*, as TERMINATIVE prefixes. Ludwig (1995) names terminative prefixes QUASI-LEXICALS, since, like superlexical prefixes, they appear to modify the meaning of the base verb, but in all other respects they behave like lexical prefixes: they (often) form derived secondary imperfectives, they create a telic verb phrase, and they are hierarchically subordinate to superlexicals, as will become clear shortly. Notice, for instance, that unlike the lexically prefixed verb *pere-ljubyty* in Ukrainian, many verbs with terminative prefixes do have a derived secondary imperfective counterpart. The prefix *do-* attached to the verb *čitat'* 'to read' in Russian, for instance, results in the pair *do-čityvat'*-2ary IMPF/*do-čitat'*-PF 'to finish reading'.

Finally, purely perfectivizing, superlexical, and lexical prefixes differ from each other in terms of their hierarchical ordering. The obligatory ordering of

<sup>5</sup> Verbs with purely perfectivizing prefixes already have an imperfective counterpart; thus, the formation of a derived secondary imperfective would be redundant with these verbs (Ludwig 1995: 30).

the three prefixes in the Slavic languages under analysis is: superlexical + lexical + purely perfectivizing (+ V), although it is rare for lexical or superlexical prefixes to be merged with a purely perfectivizing prefix (the examples under (5) below illustrate some of the few occurrences of this phenomenon). Stacking of prefixes is possible, at least at the superlexical and lexical levels, but this stacking does not affect the relative ordering of the prefixes.<sup>6</sup> The following examples provide evidence for the hierarchical relationship between the different types of prefixes (most of these examples are taken from Ludwig 1995):

- (5) *The relative ordering of purely perfectivizing and lexical prefixes* (in Russian):
- a. *komplektovat'*/*u-komplektovat'* 'to complete/bring up to strength' (purely PF prefix)
  - b. *do-u-komplektovat'*-PF 'to finish bringing up to strength/to add' (lexical + purely PF prefix)
  - c. *\*u-do-komplektovat'* (purely PF + lexical)
  - d. *raz-u-komplektovat'*-PF 'to take to pieces' (lexical + purely PF prefix)
  - e. *\*u-raz-komplektovat'* (purely PF + lexical prefix)
- (6) *The relative ordering of superlexical and lexical prefixes*:
- a. *čitat'*-IMPF 'to read' (Russian)
  - b. *pri-čitat'*-PF 'to lament for' (lexical prefix)
  - c. *za-pri-čitat'*-PF 'to begin to lament for' (superlexical + lexical prefix)
  - d. *\*pri-za-čitat'* (lexical + superlexical prefix)
  - e. *ganjaty*-IMPF 'to drive/run after, chase' (Ukrainian)
  - f. *do-ganjaty*-IMPF 'to overtake' (lexical prefix)
  - g. *z-do-ganjaty*-IMPF 'to overtake, catch up with, reach' (lexical + lexical prefix)
  - h. *na-z-do-ganjaty*-IMPF 'to chase overtake, join (after pursuit), come up with' (lexical + lexical + lexical)
  - i. *po-na-z-do-ganjaty*-PF 'to chase/overtake many or one after the other' (superlexical + lexical + lexical + lexical)
  - j. *\*na-po-z-do-ganjaty* (lexical + superlexical + lexical + lexical)
  - k. *\*na-z-po-do-ganjaty* (lexical + lexical + superlexical + lexical)
  - l. *\*na-z-do-po-ganjaty* (lexical + lexical + lexical + superlexical)

<sup>6</sup> For further discussion of prefix stacking, see Filip (1999, 2000b, 2003), Ludwig (1995), Ramchand (2004), and Svenonius (2004, forthcoming), among others.

|    |                                     |                                                                      |          |
|----|-------------------------------------|----------------------------------------------------------------------|----------|
| m. | <i>pisać</i> -IMPF                  | 'to write'                                                           | (Polish) |
| n. | <i>wy-pisywać</i> / <i>wy-pisać</i> | 'to fill out' (lexical prefix)                                       |          |
| o. | <i>po-wy-pisywać</i> -PF            | 'to fill out one after the other'<br>(superlexical + lexical prefix) |          |
| p. | * <i>wy-po-pisywać</i>              | (lexical + superlexical prefix)                                      |          |

As these examples illustrate, the ordering of prefixes is superlexical + lexical + perfective in the Slavic languages under analysis and this ordering cannot be reversed.

Ludwig (1995) illustrates that one of the patterns associated with the formation of secondary imperfectives also supports the hypothesis that superlexical and lexical prefixes are in a hierarchical relationship. With some verbs (although not all) a superlexical prefix plays a dual role as a modifier of the eventuality denoted by the verb and a grammatical (perfective) aspectual marker. Consider, for instance, the behaviour of prefixation with the Polish verb *pisać* 'to write' below:

|     |              |                 |                     |                                 |                      |
|-----|--------------|-----------------|---------------------|---------------------------------|----------------------|
| (7) | <i>pisać</i> | <i>wy-pisać</i> | <i>wy-pis-ywa-ć</i> | <i>po-wy-pis-ywa-ć</i>          | * <i>po-wy-pisać</i> |
|     | write        | fill out        | fill out            | fill out one after<br>the other |                      |
|     | (IMPF)       | (PF)            | (2ary IMPF)         | (PF)                            | (PF)                 |

Notice that the superlexical prefix cannot merge with the perfective lexically prefixed verb *wy-pisać*, hence the ungrammaticality of \**po-wy-pisać*, although it can combine with the secondary imperfective verb *wy-pis-ywa-ć*, creating a perfective verb. These two forms suggest that the following hierarchy holds: superlexical + secondary imperfective + lexical + V, that is, the superlexical prefix attaches to the verb after lexical prefixation and the formation of a secondary imperfective have taken place. Furthermore, the superlexical prefix attaches to the lexically prefixed verb in the imperfective aspect, which in turn creates a perfective verb, despite the secondary imperfective morphology on the verb.<sup>7</sup> As Ludwig (1995: 96–7) notes, if the secondary imperfective morpheme *-ivaj-* were added to \**po-wy-pisać*, not only would the verb \**po-wy-pisać* have to exist, but we might expect the verb *po-wy-pisywać* to be imperfective, contrary to fact, since *-ivaj-* is typically an imperfectivizing morpheme. This pattern provides further support for the hypothesis that

<sup>7</sup> Further verbs in Polish that exhibit this hierarchy include *po-przy-bijac*’-PF/\**po-przy-bić* ‘to nail in great quantity’ (superlexical prefix attached to *przy-bijać*-IMPF, but not *przy-bić*-PF ‘to nail’) and *po-za-dawać*-PF/\**po-za-dać* ‘to assign one after the other’ (superlexical prefix attached to *za-dawać*-IMPF, but not *za-dać*-PF ‘to assign’). See Ludwig (1995) for further examples and discussion.

lexical and superlexical prefixes are in a hierarchical relationship with each other.<sup>8</sup>

The patterns outlined above suggest that purely perfectivizing, superlexical, and lexical prefixes are distinct. The crucial assumption throughout the following analysis is that a verb is listed in the lexicon in its base form, that is, without the addition of any prefixes. I assume that the various prefixes with which a verb can combine are listed in the lexical entry of a given verb, since prefixation is not predictable in the Slavic languages. That is, a homophonous prefix can function in different ways with different verbs in a given language (it can also behave differently across the Slavic languages): it might create a purely perfective verb with one verb, it might modify the meaning of another verb in much the same way that an adverb can modify the meaning of a verb phrase, or, with another verb, it might fundamentally change the meaning and/or (a)telicity of the base verb. Thus, throughout this chapter when I refer to a base verb, I have in mind the infinitive form without any prefix attached (and without any of its additional arguments). Furthermore, a base verb does not refer to morphemes that never function as infinitives and obligatorily occur with a variety of different prefixes. Ukrainian, for instance, has the verb *upravljaty* + INSTR ‘to govern’, but the infinitive *\*pravljaty* does not exist, although a variety of different verbs exist that are built on this morphemic base (e.g. *za-pravljaty*-PF ‘to season, spice/accustom, train/sharpen’, *vy-pravljaty*-IMPF ‘to correct, improve, reform, repair’, and *pry-pravljaty*-IMPF ‘to season, spice/to fasten, affix’). I assume, however, that *upravljaty* is listed as an independent lexical item in the lexicon, given the absence of a base verb *\*pravljaty*. This hypothesis also holds for so-called *reflexiva tantum* base verbs. A number of verbs in the Slavic languages can combine with a clitic/particle/affix that begins with S-. The addition of this clitic/particle/affix results in different types of constructions, including true reflexives, reciprocals,

<sup>8</sup> With many verbs a superlexical prefix can attach to both perfective and imperfective stems. In Russian, for instance, the superlexical prefix *po-* can attach to the following perfective and imperfective stems:

- |                                       |                                                         |
|---------------------------------------|---------------------------------------------------------|
| i. <i>nosit'</i> -IMPF                | ‘to carry’                                              |
| ii. <i>vy-nosit'</i> -PF              | ‘to take out’                                           |
| iii. <i>na-vy-nosit'</i> -PF          | ‘to amass by taking out’                                |
| iv. <i>po-na-vy-nosit'</i> -PF        | ‘to take out a lot of X one (part/group) after another’ |
| v. <i>vy-naši-va-t'</i> -IMPF         | ‘to take out (/to bear a child)’                        |
| vi. <i>na-vy-naši-va-t'</i> -IMPF     | ‘to amass by taking out’                                |
| vii. <i>po-na-vy-naši-va-t'</i> -IMPF | ‘to take out a lot of X one (part/group) after another’ |
- (Filip 2000b: 75)

In examples like these it is clear that grammatical aspect is irrelevant, what is crucial is the (adverbial) effect the superlexical prefix has on the meaning of the verb phrase.

unaccusatives, and middles, among others. I assume that a base verb is also stripped of the 'reflexive' S-clitic/particle/affix if this clitic/particle/affix is not an obligatory component of the verb, that is, it is not lexicalized (I discuss the status of these verbs shortly). *Reflexiva tantum* verbs, however, are listed in the lexicon with 'reflexive' S-. Again, an infinitival *reflexiva tantum* form has to exist in order to constitute a base verb. Belarusian, for instance, has the reflexive verb *karys-tacca* 'to utilise', but an infinitive \**karystac*' without the affix *-ca* does not exist; thus, I assume *karystacca* would constitute the base verb, despite the fact that *-karystac*' exists as a morphemic base which can combine with a variety of different prefixes.

Another important assumption throughout this chapter is that prefixation in the Slavic languages is a syntactic phenomenon, including lexical prefixation (despite its misleading name). That is, prefixes are merged with a base verb in a given syntactic derivation; they are not joined with the verb as part of a lexical operation. This hypothesis is in keeping with the ideas regarding prefixation in various Slavic languages presented in Ludwig (1995), Fowler (1994), Pereltsvaig (2006), Ramchand (2004), and Svenonius (2004, forthcoming), among others. This hypothesis also finds support in the numerous works which posit that word formation is syntactic, including Baker (1988a), Borer (1994, 2005a, 2005b), Hale and Keyser (1993, 2002), and Travis (2000), among many others.

There are a number of pieces of evidence which support the hypothesis that prefixation is syntactic in the Slavic languages. Superlexical and lexical prefixes, for instance, are arguably recursive (recursion is one of the very cornerstones of syntactic theory), although prescriptively they typically stack no more than four deep, for example Ukrainian *po-na-z-do-ganjaty* 'to chase/overtake many' or 'to chase/overtake one after the other.' However, in the spoken language (and in children's language), greater flexibility in recursive possibilities exists, for example verbs like Russian *pri-pri-pri-ot-kryt'*-PF 'to open ever so ever so slightly' are possible in which *pri-* can be stacked numerous times for greater emphasis, thus:<sup>9</sup>

(8) *Recursion of prefixes in Russian:*

- |    |                         |                                                    |
|----|-------------------------|----------------------------------------------------|
| a. | <i>kryt'</i> -IMPF      | 'to cover'                                         |
| b. | <i>ot-kryt'</i> -PF     | 'to open' (lexical prefix)                         |
| c. | <i>pri-ot-kryt'</i> -PF | 'to open slightly' (superlexical + lexical prefix) |

<sup>9</sup> As Ludwig (1995: 72) notes, each level, except the purely perfectizing level, is potentially recursive. Once any level has been passed, however, and prefixation has reached the next level, a lower-level prefix type can no longer be merged in the derivation.

- d. *pri-pri-ot-kryt'*-PF 'to open ever so slightly' (spoken language) (superlexical + superlexical + lexical prefix)
- e. *pri-pri-pri-ot-kryt'*-PF 'to open ever so ever so slightly' (spoken language) (superlexical + superlexical + superlexical + lexical prefix)

Fowler (1994, 1996b) also provides a number of arguments in support of the hypothesis that verbal prefixation is syntactic. One piece of evidence he presents comes from stress patterns in Russian. In Russian, for instance, stress on an infinitival desinence results in the infinitival ending *-ti* (e.g. *nestí* 'to carry', *vestí* 'to take'), whereas stress on the stem results in the ending *-t'* (e.g. *govorít'* 'to say, talk'). Fowler points out that the addition of the stressed prefix *vý-* to base verbs with an infinitive in *-ti*, does not cause the infinitival ending to change to *-t'*, that is, the resulting verbs are *vý-nestí* 'to carry or take out/away', *vý-vestí* 'to lead out/bring out'. This pattern suggests that the infinitival desinence is determined on the basis of the unprefixated verb (i.e. the base verb), which in turn suggests that prefixation is a secondary process, occurring in the syntax. That is, if the prefixed verbs were listed as separate lexical items in the lexicon or prefixation was a lexical process, we would expect the stress pattern associated with the prefix to affect the structure of the infinitive, but it does not.

Fowler notes a similar pattern in the formation of the imperative in Russian. The form of the imperative in Russian depends on the stress pattern of the base verb conjugated in the present tense. Stem-stressed verbs in the present tense conjugation form an imperative with a zero-ending, whereas other verbs form an imperative in *-i*, for example:

- (9) *Stem-stressed verbs in the present tense:*
- a. *stávit'* 'to place, put'
  - b. *stáv'!* (imperative) [zero-ending]
- (10) *End-stressed verbs in the present tense:*
- a. *govorít'* 'to talk'
  - b. *govorí!* (imperative) [*i*-ending]

Notice that if we add the stressed prefix *vý-* to these verbs, their imperative formation remains the same:

- (11) *Addition of stressed prefix:*
- a. *vý-stávit'* 'to put out, move out/exhibit, display'
  - b. *vý-stáv'!* (imperative) [zero-ending]

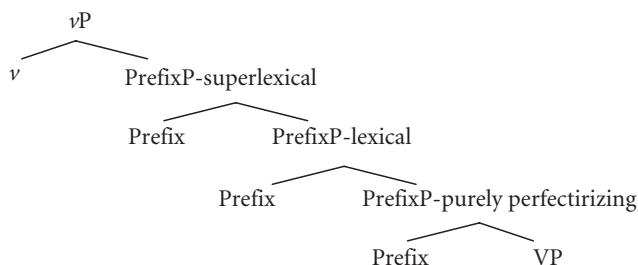
- c. *vý-govorít* 'to articulate, speak/to manage to get (agreement to)'
- d. *vý-govori!* (imperative) [*í*-ending]

These forms illustrate that the imperative desinence is determined on the basis of the unprefixed verb (i.e. the base verb), which again suggests that prefixation occurs in the syntax, since, as with the infinitival forms discussed above, if the prefixed verbs were listed as separate lexical items or prefixation were a lexical process, we would expect the stress pattern of the prefix to affect the formation of the imperative, but it does not. These examples suggest that stress patterns are listed in the lexicon and at this point a prefix is not part of the verb.<sup>10</sup>

There have been a number of different hypotheses in the literature regarding the syntactic representation of prefixes in the Slavic languages. Some have suggested that prefixes are merged as part of a small clause complement of the verb (Dimitrova-Vulchanova 1999 for Bulgarian), or that lexical prefixes, at least, are merged within a result phrase complement of the verb and they then undergo head or phrasal movement in the syntax (Ramchand 2004; Svenonius 2004, forthcoming). Fowler (1994, 1996b) suggests that prefixes are similar in nature to prepositions: like PPs they project a maximal projection (a Prefix Phrase), and like the selection of an NP complement by the head of a PP, the head of a Prefix Phrase selects a VP as its complement. The close connection between prefixes and prepositions has also been discussed elsewhere in the literature. Van Schooneveld (1978), for instance, claims prefixes are prepositions, and Matushansky (2002) provides evidence that prefixes and prepositions exhibit the same morpho-phonological behaviour in Russian. She posits that they should therefore be treated as one category. Throughout this chapter I adopt Fowler's basic syntactic analysis of prefixes in Russian for descriptive purposes and extend this analysis to all the Slavic languages under analysis. I also follow Ludwig (1995) and assume the following ordering of prefixes above the VP (this ordering is supported by the hierarchical relationship between different prefixes outlined in examples (5) and (6) (pp. 56–7)):

<sup>10</sup> See Fowler (1994, 1996b) for further examples from stress patterns which support the hypothesis that prefixation is syntactic. As Fowler (1994) also notes, the hypothesis that prefixation is syntactic enables us to limit the descriptive load of the lexicon. There are a number of verbs with irregular conjugation patterns, for instance, in all the Slavic languages, e.g. verbs like Russian *dat* 'to give' and *est* 'to eat'. If prefixation were a lexical process or each prefixed verb were listed as a separate lexical item, we would need to list many instances of these irregular conjugation patterns in the lexicon, since these irregular verbs combine with a variety of different prefixes. If we assume, however, that a base verb merges with a prefix in the syntax, then only a few irregular verbs need to be listed as such in the lexicon.



(12) *The syntactic hierarchy of prefixes in the Slavic languages:*

The exact syntax of the different types of prefixes is not crucial for our purposes. What is important, however, is that, at least initially, lexical prefixes are merged below the  $\nu$ P level, where they are able to play a role in the syntax of an eventuality. The relevance of this point will become clear shortly.

Thus far it should be crystal clear that I assume a verb is listed in the lexicon in its base form, for example, the infinitive without any of its prefixes or arguments (or it is listed as the root of the infinitive, provided that root actually forms an infinitive in the Slavic languages, e.g. it does not obligatorily occur with a prefix). The prefixal combinatory possibilities are listed as part of the subentry of a given verb, since, as mentioned above, the prefixes with which a given verb can combine are not predictable. These prefixes can then merge with the base verb in the syntax.

### 3. Case and lexical aspect

Consider now the alternation between lexical and structural accusative C/case discussed in detail in chapter 2, namely the opposition between the accusative Case and the genitive, dative, or instrumental case on the argument with certain verbs. If we analyse the event structure of those base verbs that take lexical case-marked arguments versus those that take accusative arguments in the Slavic languages under analysis, a striking pattern comes to the fore: those base verbs whose event structure is compositionally determined take accusative Case-marked arguments, whereas those (two-place) base verbs that take lexical case-marked arguments are always atelic and their event structure is never compositionally determined.<sup>11</sup> That is, the presence or absence of an internal argument or the status of that argument as quantized or non-quantized does not affect the (a)telicity of lexical case-assigning

<sup>11</sup> The importance of the distinction between two-place versus three-place verbs with lexical case-marked arguments will become clear shortly.

base verbs.<sup>12</sup> Furthermore, no telicizing prefixes merge with lexical case-assigning base verbs.<sup>13</sup> The following two sections illustrate this generalization.

### 3.1 *The role of an internal argument in event structure alternations*

As discussed extensively in chapter 2, the presence or absence of an internal argument and the status of that internal argument as quantized or non-quantized can play a role in the event structure of a subclass of verbs in many languages, including the Slavic languages. In chapter 2, I referred to these verbs as creation/consumption verbs. They include verbs like *build*, *eat*, *write*, *drink*.<sup>14</sup> Recall, for instance, that a verb phrase like *jest' jabloko* 'to eat the/an apple' in Russian is telic, whereas *pit' čaj* 'to drink tea' is atelic, regardless of the imperfective aspectual marking on the verb, as our progressive diagnostic illustrated in chapter 2, repeated below under examples (13) and (14).

- (13) Kogda pozvonila mama, Ivan jel jabloko.  
 When phoned-PF mum-NOM Ivan-NOM ate-IMPF apple-ACC  
 'When Mum called, Ivan was eating an/the/some apple.'
- (14) Kogda pozvonila mama, Ivan pil čaj.  
 when phoned-PF mum-NOM Ivan-NOM drank-IMPF tea-ACC  
 'When Mum called, Ivan was drinking tea.'

As stated in chapter 2, the lower clause *Ivan jel jabloko* 'Ivan was eating the/an apple' in example (13) does not have the present perfect inference that Ivan

<sup>12</sup> Recall from chapter 2 that I use the term NON-QUANTIZED as a catch-all term for homogeneous nouns that includes both divisiveness (all subparts of, e.g. apples are apples) and cumulativeness (apples + apples = apples).

<sup>13</sup> See section 3.3 for discussion of potential counterexamples to this generalization.

<sup>14</sup> My concern in what follows is with the role of an internal argument in the (a)telicity of a verb phrase, not in the role it can play in 'measuring out an eventuality' (Tenny 1994). That is, both external and internal arguments can measure out an eventuality, as is clear in constructions such as, 'At the turtle race, the winning turtle crossed the finish line in 42 seconds' (Dowty 1991). That is, the body of the turtle provides a measure for the eventuality. The internal argument 'the finish line', however, provides the inherent endpoint for the verb phrase 'to cross the finish line', as examples like (i) and (ii) below suggest.

i. At the animal race, the turtles crossed the finish line in 42 seconds.  
 ii. At the animal race, turtles crossed the finish line in 42 seconds.

Notice that the status of an external argument as quantized or non-quantized has no effect on the inherent telicity of the verb phrase in these constructions, despite its status as a so-called incremental theme. See Dowty (1991) and Filip (1999) for further discussion of so-called external argument incremental themes.

has eaten the apple (up), it only has the progressive interpretation that he was engaged in eating the apple. The lower clause *Ivan pil čaj* 'Ivan was drinking tea' in example (14), on the contrary, has the present perfect inference that Ivan has already drunk tea. This diagnostic illustrates that only the verb phrase *jest' jabloko* 'to eat the/an apple' is telic. That is, the status of the internal argument in example (13) as quantized results in a telic verb phrase, whereas the non-quantized argument in example (14) results in an atelic verb phrase.

Now consider the status of lexical case-assigning verbs. First of all, lexical case-assigning verbs are always atelic in the Slavic languages. Recall from chapter 2 that once we perfectivize a verb in the Slavic languages, we can use the 'in X time' diagnostic to determine whether the verb phrase is telic or atelic. Notice that all of the following lexical case-assigning verbs are ungrammatical with the 'in X time' adverbial in the Slavic languages, despite the fact that they are in the perfective aspect. (It is the adverbial 'in X time' that makes these sentences ungrammatical, not the presence of the internal arguments.)<sup>15</sup>

(15) *Genitive internal arguments:*

- a. \*Dziczja pa-bajalasja susedki za tydzien'. (Belarusian)  
 child feared-PF neighbour-GEN in week  
 'The child feared the neighbour (\*in a week).'
- b. \*Nataša kosnulas' stola za 10 minut. (Russian)  
 Natasha touched-PF table-GEN in 10 minutes.  
 'Natasha touched the table (\*in 10 minutes).'
- c. \*Ljuda po-curalasja susidky za 10 (Ukrainian)  
 Ljuda shunned-PF neighbour-GEN in 10  
 xvylyn.  
 minutes  
 'Ljuda shunned her neighbour (\*in 10 minutes).'

<sup>15</sup> Short time periods, like *za sekundu* 'in a second' and *za dve minuty* 'in two minutes' in Russian, can become semantically bleached and mean 'quickly' (this is true of *za* in the Slavic languages in general and *w* in Polish). Thus, an example like the following is grammatical in Russian if the 'in X time' adverbial means 'quickly' and not literally that the eventuality was completed in a second.

- i. Natasha kosnulas' čego-nibud' za sekundu  
 Natasha touched something-GEN in second  
 'Natasha touched something quickly.'

It is important to note that the grammaticality of examples like these are the result of semantic bleaching, i.e. examples like these are not interpreted as inceptives with the time expression measuring the time taken before an eventuality came into effect. If such an interpretation were possible, we would expect larger time periods to be grammatical in constructions like these, but they are not.

- d. \*Boris se zúčastnil pohřbu za jednu (Czech)  
 Boris REFL participated-PF funeral-GEN in one  
 hodinu.  
 hour.  
 'Boris participated in a funeral (\*in one hour).'
- e. \*Dotknęłam jego ramienia w 10 sekund. (Polish)  
 touched-1SG his arm-GEN in 10 seconds.  
 'I touched his arm (\*in 10 seconds).'
- f. \*Jana sa z-hrozila Barbory za 30 minút. (Slovak)  
 Jana REFL feared-PF Barbara-GEN in 30 minutes.  
 'Jana feared Barbara (\*in 30 minutes).'
- g. \*Za ned(j)elju/tjedan dana sam se po-bojao (BCS)  
 in week day AUX-1SG REFL feared-PF  
 Draganove majke.  
 Dragan mother-GEN.  
 'I feared Dragan's mother (\*in a week).'

(16) *Dative internal arguments:*

- a. \*Maksim pa-zajzdrosciŭ susedu za mesjac. (Belarusian)  
 Maksym envied-PF neighbour-DAT in month  
 'Maksym envied his neighbour (\*in a month).'
- b. \*On povinovaľsja prepodavatel'nice za nedelju.<sup>16</sup> (Russian)  
 He obeyed-PF teacher-DAT in week  
 'He obeyed his teacher (\*in a week).'
- c. \*Maksym po-zazdryv susidovi za misjac'. (Ukrainian)  
 Maksym envied-PF neighbour-DAT in month.  
 'Maksym envied his neighbour (\*in a month).'
- d. \*Jana ublížila Borisovi nešetrnými (Czech)  
 Jana maltreated-PF Boris-DAT inconsiderate  
 slovy za 30 minut.  
 words-INSTR in 30 minutes.  
 'Jana abused Boris with inconsiderate words (\*in 30 minutes).'
- e. \*Pianista za-akompaniował skrzypaczce w 10 minut. (Polish)  
 pianist accompanied-PF violinist-DAT in 10 minutes  
 'The pianist accompanied the violinist (\*in 10 minutes).'

<sup>16</sup> The verb *povinoval'sja* is biaspectual in the past tense.

f. \*Ján za-lichotil šéfovi za týždeň. (Slovak)  
 Jan flattered-PF boss-DAT in week  
 'Jan flattered his boss (\*in a week).'

g. \*Milan je po-laskao šefu za ned(j)elju/tjedan dana. (BCS)  
 Milan AUX praised-PF boss-DAT in week day  
 'Milan praised his boss (\*in a week).'

(17) *Instrumental internal arguments:*

a. \*Ira pa-grebavala Maksimam za 30 hvinin. (Belarusian)  
 Ira abhorred-PF Maksym-INSTR in 30 minutes  
 'Ira abhorred Maksym (\*in 30 minutes).'

b. \*Ona s-komandovala diviziej za god. (Russian)  
 She commanded-PF division-INSTR in year  
 'She commanded the/a division (\*in a year).'

c. \*Ljuda zlovžyla joho ljubov'ju za rik. (Ukrainian)  
 Ljuda abused/misused-PF his love-INSTR in year  
 'Ljuda abused his love (\*in a year).'

d. \*Jana pohrdla zbabělcem za 30 minut. (Czech)  
 Jana despised-PF coward-INSTR in 30 minutes.  
 'Jana despised/scorned the coward (\*in 30 minutes).'

e. \*Za-opiekowałam się mamą w 2 dni  
 took-care-PF REFL mum-INSTR in 2 days  
 kiedy była chora. (Polish)  
 when was sick  
 'I took care of my mum (\*in two days) when she was sick.'

f. \*Dávid opovrhol Janom za týždeň. (Slovak)  
 David despised-PF Jan-INSTR in week  
 'David despised Jan (\*in a week).'

g. \*General Petrović je komandovao/komandirao Petom (BCS)  
 general Petrović AUX commanded-PF Fifth  
 Armijom za godinu dana.<sup>17</sup>  
 Army-INSTR in year day.  
 'General Petrović commanded the Fifth Army (\*in a year).'

The ungrammaticality of the 'in X time' adverbial in these examples illustrates that lexical case-assigning verbs are atelic. These verbs are not only

<sup>17</sup> The verb *komandovati* 'to command' is biaspectual.

always atelic, they also never merge with an internal argument that can affect their event structure, that is, no lexical case-assigning verbs constitute creation/consumption verbs. If the presence or absence of an internal argument or the status of an internal argument as quantized or non-quantized can affect the event structure of a base verb, that argument obligatorily occurs in the accusative Case in the Slavic languages. The appendix at the end of this book provides further examples of lexical case-assigning verbs in the Slavic languages listed in their base form with perfectivizing prefixes (if these exist for a given verb). All these verbs are atelic, their event structure is never affected by the presence or absence of an internal argument, by the status of that argument as quantized or non-quantized, or by the perfective aspect.

That only accusative Case-marked arguments occur with creation/consumption verbs in the Slavic languages provides the first piece of evidence that the accusative Case is linked to the compositional event structure of a verb phrase. As is well-known, creation/consumption verbs constitute a small subclass of verbs in languages. That is, the event structure of many verbs is not affected by the presence or absence of an internal argument or the status of that argument as quantized or not. Like English, the verb *mešat* 'to stir' in Russian, for instance, is atelic, and the status of its internal argument as quantized or not never changes its atelic status. 'I stirred the bowl of soup' is atelic in English, just as is 'I stirred bowls of soup'. The verb *mešat* in Russian behaves in the same way as its English counterpart, yet, like creation/consumption verbs, it takes an accusative Case-marked internal argument. In the following section I will show that the event structure of non-creation/consumption verbs that merge with accusative Case-marked arguments in the Slavic languages is still compositional, namely the event structure of these verbs is affected by telicizing prefixes.

### 3.2 *Telicizing prefixes and C/case assignment in the Slavic languages*

As discussed in section 2, lexical prefixes can affect the (a)telicity of a verb phrase, that is, they can play a role in the event structure of a verb phrase. If we analyse the prefixation possibilities of base verbs in the Slavic languages the pattern that becomes clear is that accusative Case-marked arguments merge with base verbs whose event structure is affected by the addition of a lexical prefix, whereas the atelic status of those base verbs that assign a lexical case is never affected by the addition of a lexical prefix (I discuss potential

counterexamples to this claim presently).<sup>18</sup> As already mentioned, it is common knowledge that the event structure of many verbs is not affected by the status of an internal argument, for example atelic verbs like *stir*, *love*, *know*, *push*, yet verbs like these also assign the accusative Case in the Slavic languages. Notice, however, that an atelic base verb like *mešat* ‘to stir’ in Russian can merge with the resultative (i.e. terminative) prefix *raz-*, which in turn creates a telic verb phrase, as the following example illustrates:

- (18) Ja raz-mešala sup za 10 minut.  
I stirred-PF-RESULT soup-ACC in 10 minutes

As Comrie (1976: 18) observes, resultative prefixes convey that an eventuality is complete, rather than merely completed (finished), that is, unlike purely perfectivizing prefixes, they not only signal that an eventuality is completed (bounded), but also that a resultant state of affairs holds. An example like (18) illustrates that a resultative prefix affects the event structure of the base verb *mešat* ‘to stir’, and, as expected, that base verb merges with an accusative Case-marked argument.

Consider further the following prefixation possibilities with atelic base verbs like *love*, *know*, and *push* in the Slavic languages. Notice that we can add telicizing lexical prefixes to all of these base verbs in all the Slavic languages under analysis:<sup>19</sup>

- (19) *Atelic base verbs in Belarusian:*
- |    |                                       |                            |
|----|---------------------------------------|----------------------------|
| a. | <i>ljubic</i> ’-IMPF + ACC            | ‘to love’ (atelic)         |
|    | <i>raz-ljubic</i> ’-PF + ACC          | ‘to cease to love’ (telic) |
| b. | <i>vedac</i> ’-IMPF + ACC             | ‘to know’ (atelic)         |
|    | <i>vy-vedvac</i> ’/vy-vedac’ + ACC    | ‘to find out’ (telic)      |
| c. | <i>šturxac</i> ’/šturxnuc’ + ACC      | ‘to push’ (atelic)         |
|    | <i>vy-šturxvac</i> ’/vy-šturxac’      |                            |
|    | <i>vy-šturxnuc</i> ’ + ACC            | ‘to push out’ (telic)      |
|    | <i>u-šturxvac</i> ’/u-šturxnuc’ + ACC | ‘to push in’ (telic)       |

<sup>18</sup> See also Babko-Malaya (1999) for the claim that only lexical prefixes in Russian can form accomplishments and that these verbs obligatorily assign the accusative Case. Babko-Malaya focuses on the distinction between accusative and instrumental C/case-assigning verbs in Russian, since she does not treat genitive and dative cases as true lexical cases. In her analysis, lexical prefixes do not merge with instrumental case-assigning base verbs. In my analysis, a lexical prefix could potentially merge with an instrumental (or genitive or dative) case-assigning base verb, but that prefix will not change the event structure of the base verb from an atelic one to a telic one.

<sup>19</sup> Not all the prefixation possibilities have been listed with each verb.

(20) *Atelic base verbs in Russian:*

- a. *ljubit'*-IMPF + ACC 'to love' (atelic)  
*raz-ljubit'/raz-ljubljat'* + ACC 'to cease to love' (telic)
- b. *vedat'*-IMPF + ACC 'to know' (atelic)  
*(po)-raz-vedat'/(po)-raz-vedyvat'* + ACC 'to find out about' (telic)  
*vy-vedat'/vy-vedyvat'* + ACC 'to find out/worm out/pump out' (telic)
- c. *znat'*-IMPF + ACC 'to know' (atelic)  
*raz-u-znat'/raz-u-znavat'* + ACC 'to find out' (telic)
- d. *tolkat'*-IMPF/*tolknut'*-PF + ACC 'to push' (atelic)  
*vy-talkivat'/vy-tolknut'*; 'to push out' (telic)  
*vy-tolkat'* + ACC  
*v-talkivat'/v-tolknut'* + ACC 'to push in' (telic)

(21) *Atelic Base Verbs in Ukrainian:*

- a. *ljubyty*-IMPF + ACC 'to love' (atelic)  
*roz-ljubyty* + ACC 'to stop loving' (telic)
- b. *znaty*-IMPF + ACC 'to know' (atelic)  
*di-znaty-sja/di-znavaty-sja* 'to find out, get information, learn' (telic)  
+ ACC  
*pro-znaty/pro-znavaty* + ACC 'to find out about' (telic)
- c. *pxaty*-IMPF + ACC 'to push' (atelic)  
*za-pxaty/za-pyxaty* + ACC 'to push in' (telic)  
*vy-pxaty/vy-pyxaty* + ACC 'to push out/to stuff (e.g. birds or animals)/to upholster' (telic)

(22) *Atelic base verbs in Czech:*

- a. *milovat*-IMPF + ACC 'to love' (atelic)  
*do-milovat*-PF + ACC 'to stop loving/stop making love' (telic) [rare]
- b. *vědět*-IMPF + ACC 'to know' (atelic)  
*vy-z-vídat/vy-z-vědět* + ACC 'to find out/ferret, sniff out' (telic)
- c. *tlačit*-IMPF + ACC 'to push' (e.g. a cart) (atelic)  
*pro-tlačovat/pro-tlačit* + ACC 'to get or force through' (telic)  
*vy-tlačovat/vy-tlačit*-PF + ACC 'to push out/press, squeeze out/extract' (telic)



(23) *Atelic base verbs in Polish:*

- a. *kochać*-IMPF + ACC 'to love' (atelic)  
*od-kochiwać się/od-kochać się* + ACC 'to cease to love' (telic)
- b. *wiedzieć* + ACC 'to know' (atelic)  
*do-wiadywać się/do-wiedzieć się* + ACC 'to find out' (telic)
- c. *znać* + ACC 'to know' (atelic)  
*po-znawać/po-znać* + ACC 'to get to know/learn/find' (telic)
- d. *pchać/pchnąć* + ACC 'to push' (atelic)  
*w-pychać/we-pchnąć* + ACC 'to stuff/cram' (telic)  
*prze-pychać/prze-pchać, prze-pchnąć* + ACC 'to push through' (telic)

(24) *Atelic base verbs in Slovak:*

- a. *ľúbiť*-IMPF + ACC 'to love' (atelic)  
*od-ľúbiť sa*-PF 'to cease to love' (telic)
- b. *milovať*-IMPF + ACC 'to love' (atelic)  
*pre-milovať*-PF + ACC 'to cease to love' (telic)
- c. *vedieť*-IMPF + ACC 'to know' (atelic)  
*do-z-vedieť sa*-PF + ACC 'to find out' (telic)
- d. *tisnúť*-IMPF + ACC 'to push' (atelic)  
*na-tisnúť/na-tískat'* + ACC 'to squeeze in/make someone do something' (telic)  
*v-tisnúť/v-tískat'* + ACC 'to push, shove, or drive in' (telic)

(25) *Atelic base verbs in BCS:*

- a. *vol(j)eti*-IMPF + ACC 'to love' (atelic)  
*pri-vol(j)eti* 'to induce, persuade, talk into/to cease to love (poetic)' (telic)
- b. *znati*-IMPF + ACC 'to know' (atelic)  
*do-znavati/do-znati* + ACC 'to find out/learn' (telic)
- c. *gurati*-IMPF/*gurniti*-PF + ACC 'to push' (atelic)  
*pro-gurati/pro-gurniti* + ACC 'to push through' (telic)  
*u-guravati/u-gurati* + ACC 'to push in/insert' (telic)  
*iz-guravati/iz-gurati* + ACC 'to push out' (telic)

Evidence for the telic status of the prefixed verbs in the examples under (19)–(25) comes from their grammaticality with the ‘in X time’ adverbial. The following provides some illustrative examples for the telic status of some of the prefixed verbs above:

- (26) Ivan        raz-ljubil        Iru        za 5 let.        (Russian)  
 Ivan-NOM ceased-to-love-PF Ira-ACC in 5 years  
 ‘Ivan ceased to love Ira in (after) five years.’
- (27) Ivan        raz-u-znal        sekret        svoego vruga za 6  
 Ivan-NOM found-out-PF secret-ACC his-own enemy in 6  
 mesjacev.  
 months  
 ‘Ivan found his enemy’s secret out in six months.’
- (28) Maša        v-tolknula        detej        (v poezd) za 20 minut.  
 Masha-NOM pushed-in-PF children-ACC (into train) in 20 minutes  
 ‘Masha pushed the children into the train in 20 minutes.’
- (29) Vyzvěděla    to        od něho za půl hodiny. (Czech)  
 found-out-PF that-ACC from him in half hour  
 ‘She got the information out of him in half an hour.’
- (30) W 20 minut wepchnęła wszystko do (Polish)  
 in 20 minutes crammed-PF everything-ACC in  
 szafy.  
 cupboard  
 ‘She crammed everything into the cupboard in twenty minutes.’
- (31) Progurao sam žicu kroz rupu za 10 (BCS)  
 pushed-PF AUX-1SG wire-ACC through hole in 10  
 minuta.  
 minutes  
 ‘I pushed the wire through the hole in ten minutes.’

Examples like these provide further support for the claim that the accusative Case in the Slavic languages is linked to whether the event structure of a base verb is compositional.

Consider now the following examples of prefixation possibilities with some lexical case-assigning verbs in a number of Slavic languages:<sup>20</sup>

<sup>20</sup> I determined the prefixation possibilities with the lexical case-assigning verbs in the Slavic languages by using reverse dictionaries, where such dictionaries were available (e.g. for Russian, Ukrainian, Polish, and BCS). For some languages, the Academy Dictionary listed all the prefixation

(32) *Russian:*

- |    |                                       |                                                          |
|----|---------------------------------------|----------------------------------------------------------|
| a. | <i>komandovat'</i> + INSTR            | 'to command, be in command (of)'                         |
| b. | <i>ot-komandovat'</i> -PF + INSTR     | 'to command, serve as a commander'                       |
| c. | <i>po-komandovat'</i> -PF + INSTR     | 'to command for a while'                                 |
| d. | <i>pro-komandovat'</i> -PF + INSTR    | 'to command for a time'                                  |
| e. | <i>na-komandovat'-sja</i> -PF + INSTR | 'to command sufficiently, have one's fill of commanding' |

(33) *Ukrainian:*

- |    |                                  |                                         |
|----|----------------------------------|-----------------------------------------|
| a. | <i>pikluvatysja</i> -IMPF + DAT  | 'to take care of, provide for, protect' |
| b. | <i>za-pikluvatysja</i> -PF + DAT | 'to become worried or anxious'          |
| c. | <i>po-pikluvatysja</i> -PF + DAT | 'to take care of' [rare]                |

(34) *Czech:*

- |    |                                |                                   |
|----|--------------------------------|-----------------------------------|
| a. | <i>spílat'</i> -IMPF + DAT     | 'to scold'                        |
| b. | <i>na-spílat'</i> -PF + DAT    | 'to scold'                        |
| c. | <i>na-spílat' se</i> -PF + DAT | 'to scold a lot and often' [rare] |
| d. | <i>vy-spílat'</i> -PF + DAT    | 'to scold'                        |
| e. | <i>za-spílat' si</i> -PF       | 'to swear'                        |

possibilities for a given verb (e.g. the Czech Academy Dictionary). For Belarusian and Slovak I looked up every possible prefixation possibility for each lexical case-assigning verb. For all the languages, I then tested all the perfective prefixed verbs with the 'in X time' diagnostic on at least three native speakers for each language, usually more. If the 'in X time' adverbial was grammatical with any of these lexical case-assigning verbs, the time adverbial measured the preparatory stage of the eventuality, i.e. it did not measure the time taken for the inherent endpoint of the eventuality to be reached. I used one further test to check this hypothesis, namely the addition of a coordinate clause with the imperfective verb in the present TENSE conveying the same meaning combined with the adverb 'still'. The following example from BCS illustrates this test:

- |    |                           |              |                     |                  |                |
|----|---------------------------|--------------|---------------------|------------------|----------------|
| i. | Za ned(j)elju/tjedan dana | Milan se     | us-protivio         | izgradnji        | hidroelektrane |
|    | in week                   | day Milan    | REFL opposed-PF     | construction-DAT | hydroelectric  |
|    | i još                     | uv(j)ek se   | tome protivi.       |                  |                |
|    | and still                 | already REFL | it-DAT opposes-IMPF |                  |                |

'In (after) a week Milan began to oppose the hydroelectric construction and he still opposes it.'

This example illustrates that the 'in X time' adverbial measures the preparatory stage of the action denoted by the verb, that is, it does not measure the time taken before an inherent endpoint is reached, since the action described by the verb can continue in time. I have not listed all the prefixation possibilities with lexical case-assigning verbs in the appendix, as there was some discrepancy among speakers as to which prefixes existed in the contemporary spoken norm.

(35) *Polish:*

- a. *gardzić*-IMPF + INSTR 'to despise, scorn'
- b. *po-gardzić*-PF + INSTR 'to despise, scorn'
- c. *wz-gardzić*-PF + INSTR 'to reject, spurn'

(36) *BCS:*

- a. *prkositi*-IMPF + DAT 'to defy'
- b. *na-prkositi*-PF + DAT 'to defy/act maliciously towards'
- c. *ot-prkositi*-PF + DAT 'to respond with spite' [rare]

The following examples illustrate that none of these prefixed lexical case-assigning verbs is telic, since they are ungrammatical with the 'in X time' adverbial:

(37) *Russian:*

- a. \*On s-komandoval diviziej za nedelju.  
he commanded-PF division-INSTR in week  
'He commanded a/the division (\*in a week).'
- b. \*On ot-komandoval diviziej za nedelju.  
he commanded-PF division-INSTR in week  
'He served as the commander of a/the division (\*in a week).'
- c. \*On po-komandoval diviziej za nedelju.  
he commanded-for-a-while-PF division-INSTR in week  
'He commanded a/the division for a while (\* in a week).'
- d. \*On pro-komandoval rossijskim flotom za  
He commanded-for-a-time-PF Russian fleet-INSTR in  
2 goda.<sup>21</sup>  
2 years  
'He commanded for a certain time the Russian fleet (\*in two years).'
- e. \*On na-komandoval-sja rossijskim flotom za  
he commanded-sufficiently-PF Russian fleet-INSTR in  
2 goda.<sup>22</sup>  
2 years  
'He had his fill of commanding the Russian fleet (\*in two years).'

<sup>21</sup> In fact this verb is possible with the 'for X time' adverbial, despite its perfective aspect.

<sup>22</sup> The 'in X time' adverbial is grammatical for some speakers (although not all) in this example if it measures the preparatory stage before the onset of the initiation stage, i.e. the time taken before he was fed up with commanding the Russian fleet. In this interpretation, he remains fed up with commanding, i.e. there is no inherent endpoint to the action.

(38) *Ukrainian:*

- \*Vona za-pikluvalasja svojim zdorovjam za 10 xvylyn.  
she began-to-worry-PF her health-INSTR in 10 minutes  
'She began to worry about her health (\*in ten minutes).'

(39) *Czech:*

- a. \*Žena mi na-spílala za 10 minut.  
wife me-DAT scolded-PF in 10 minutes  
'My wife scolded me (\*in ten minutes).'
- b. \*Za 30 minut hodně se mu na-spílal  
in 30 minutes really REFL him-DAT rebuked-much-PF  
za jeho neochotu.  
for his unwillingness  
'He rebuked him a lot for his unwillingness (\*in thirty minutes).'
- c. \*Petr vy-spílal kamarádovi za 30 minut za  
Peter scolded-PF friend-DAT in 30 minutes for  
to, že nepřišel na schůzku.  
that which NEG-arrive to meeting  
'Peter scolded his friend (\*in thirty minutes) because he didn't  
come to the meeting.'
- d. \*Za-spílal si za 5 minut.  
he swore-PF REFL in 5 minutes  
'He swore (\*in five minutes).'

(40) *Polish:*

- a. \*On pogardził mną w 2 miesiące.  
he despised-PF me-INSTR in 2 months  
'He despised me (\*in two months).'
- b. \*On wzgardził naszą pomocą w 10 minut.  
he rejected-PF our help-INSTR in 10 minutes  
'He rejected our help (\*in 10 minutes).'

(41) *BCS:*

- \*Dragan je na-prkosio Milanu za mesec dana.  
Dragan AUX defied-PF Milan-DAT in month day  
'Dragan defied Milan (\*in a month).'

These examples support the hypothesis presented throughout this chapter that the event structure of lexical case-assigning base verbs is not compositional, whereas the event structure of accusative Case-assigning base verbs is. None of the lexical case-assigning verbs listed in the appendix of this book

merge with telicizing lexical prefixes; that is, they are all atelic verbs whose event structure is not determined compositionally (as mentioned above, I discuss potential counterexamples to this claim in section 3.3).

In chapter 2, I provided examples of semantically similar verbs in one and the same language that assigned different types of C/case. Recall, for instance, that both the verbs *podražat'* and *imitirovat'* mean 'to imitate' in Russian, yet *podražat'* takes a dative case-marked internal argument, whereas *imitirovat'* takes an accusative one. The verbs *izmenit'* and *predat'* in Russian also both mean 'to be unfaithful to/betray', yet *izmenit'* takes a dative case-marked argument, whereas *predat'* takes an accusative one. As Schoorlemmer (1995) correctly notes, examples like these demonstrate just how unpredictable lexical case assignment is, at least in terms of the semantics of the verb. The different C/case-marking possibilities with these semantically similar verbs, however, are entirely in keeping with the analysis presented here, namely, only the event structure of the accusative Case-assigning base verbs is compositional. The lexical case-assigning verbs are always atelic and their event structure is never determined compositionally. Notice, for instance, that the resultative prefix *s-* can be merged with the verb *imitirovat'*, creating a telic verb phrase, as the following example illustrates:

- (42) P'janyj voditel' s-ymitiroval ugon svoego avtomobilja  
 drunk driver imitated-PP theft-ACC his automobile  
 za 10 minut.  
 in 10 minutes  
 'The drunk driver imitated the theft of his automobile in ten minutes.'

This example demonstrates that like telic perfective verbs in general, the resultative verb *s-ymitirovat'* is grammatical with the 'in X time' adverbial. The semantically similar dative case-assigning verb *podražat'* is an imperfective verb that does not combine with any prefixes (there is no verb *\*dražat'* or *\*ražat'*, i.e. this is not a prefixed verb already). That is, unlike the verb *imitirovat'*, this base verb always remains atelic. Support for the atelic status of the imperfective base verb *podražat'* comes from the progressive diagnostic. Consider, for instance, the possible interpretation of example (43).

- (43) Kogda mama pozvonila, Ivan podražal agentu-007  
 when mum called, Ivan imitated-IMPF agent-007-DAT  
 v Londone.  
 in London  
 'When mum called, Ivan was imitating agent-007 in London.'

The progressive clause in this construction can have a present perfect inference, that is, it can be interpreted as 'Ivan has imitated agent-007 in London',

but not 'Ivan has finished imitating agent-007 in London' or 'Ivan has successfully imitated agent-007 in London'. That is, the progressive test suggests this verb is atelic in Russian. Thus, that these two semantically similar verbs assign different C/cases to their internal arguments is entirely consistent with the analysis put forth here: only the accusative Case is linked to the compositional event structure of a base verb.

The verbs *izmenit'* and *pre-dat'* 'to be unfaithful to/betray' in Russian exhibit the same sort of behaviour. The verb *pre-dat'* + ACC 'to be unfaithful to/betray' is the result of lexical prefixation to the base verb *dat'* 'to give' (as is clear from the fact that both verbs have the same irregular conjugation pattern). The event structure of a base verb like *dat'* 'to give' is determined compositionally; thus, we expect it to merge with an accusative Case-marked argument (e.g. *dat'* + ACC + inherent DAT). Notice, for example, that merging the prefix *vy-* with this verb results in the telic verb phrase *vy-dat'* 'to give out, pay out', e.g. *Načal'nik vy-dal zaplatu-ACC za 10 minut* 'The boss paid out the wages in ten minutes'. (I discuss the role of prefixes in C/case alternations shortly.) Consider now the status of the verb *izmenit'* + DAT. The base verb \**menit'* does not exist; thus, *izmenit'* constitutes the base verb.<sup>23</sup> Crucially, this verb is atelic, and its event structure is never compositional, that is, *izmenit'* is ungrammatical with the 'in X time' adverbial and it does not merge with any telicizing prefixes; thus, a lexical case-marked argument is expected with this verb.

That verbs similar in meaning would assign different C/cases within a language (and across the Slavic languages) is accounted for by the analysis presented here. There is nothing about the semantics of a base verb that will predict whether its event structure is compositional (unless, for instance, it belongs to the creation/consumption subclass of verbs). That is, (telicizing or atelicizing) lexical prefixation is unpredictable both within a language and across the Slavic languages, hence the existence of verbs that are similar in meaning which assign (value) different C/cases. Thus, neither the accusative–lexical C/case opposition on an internal argument nor the compositional event structure of a base verb have anything to do with the semantics of a given verb. The only predictable pattern across the Slavic languages is that the accusative–lexical C/case opposition is directly linked to whether the event structure of a base verb is compositional or not, as illustrated above.

Before turning to a discussion of potential counterexamples to the claims put forward thus far, there are a couple of further assumptions about the

<sup>23</sup> The imperfective counterpart to *izmenit'* is the verb *izmenjat'* + DAT. There is a base verb *menjat'* 'to change' in Russian, which can merge with the prefix *iz-*. The resulting verb phrase, however, means 'to change', not 'to be unfaithful to'. Thus, I assume that both *izmenit'*-PF and *izmenjat'*-IMPF constitute base verbs in their meaning 'to be unfaithful to'.

nature of lexical case marking that warrant mention. First of all, the patterns discussed above hold for 'bare' lexical case-marked arguments, not lexical cases assigned by prepositions, including covert prepositions. A number of verbs in the Slavic languages, for instance, can occur with a PP complement that assigns the genitive, dative, or instrumental case, or the preposition can be omitted and the verb occurs with just the genitive, dative, or instrumental argument. The examples under (44) below illustrate this phenomenon in Ukrainian and Czech (although it occurs in all of the Slavic languages under analysis):

(44) *Overt and Covert PPs with Genitive, Dative, and Instrumental Arguments*

a. *Ukrainian:*

|                                                |                                                   |
|------------------------------------------------|---------------------------------------------------|
| <i>verxovodyty</i> + INSTR/ <i>nad</i> + INSTR | 'to lord it over'                                 |
| <i>vidcuratycja</i> + GEN/ <i>vid</i> + GEN    | 'to leave, abandon'                               |
| <i>zrikatysja</i> + GEN/ <i>vid</i> + GEN      | 'to give up'                                      |
| <i>mstytyjsja</i> + DAT/ <i>na</i> + DAT       | 'to take revenge (upon),<br>avenge' <sup>24</sup> |
| <i>storonytysja</i> + GEN/ <i>vid</i> + GEN    | 'to shun, avoid'                                  |
| <i>sjagaty/sjagnuty</i> + GEN/ <i>do</i> + GEN | 'to reach' <sup>25</sup>                          |

b. *Czech:*

|                                                        |                                                                              |
|--------------------------------------------------------|------------------------------------------------------------------------------|
| <i>honosit se</i> + INSTR/ <i>s</i> + INSTR            | 'to boast, parade'                                                           |
| <i>hospodařit</i> + INSTR/ <i>s</i> + INSTR            | 'to manage'                                                                  |
| <i>vzpouzet se</i> + DAT/ <i>proti</i> + DAT           | 'to oppose, resist'                                                          |
| <i>vzepřít se/vzpírat se</i> + DAT/ <i>proti</i> + DAT | 'to rebel, revolt against,<br>oppose, resist (i.e. put<br>up resistance to)' |
| <i>obírat se</i> + INSTR/ <i>s</i> + INSTR             | 'occupy oneself with,<br>busy oneself with'                                  |
| <i>zabývat se</i> + INSTR/ <i>s</i> + INSTR            | 'occupy oneself with,<br>busy oneself with'                                  |

I assume that with these verbs, the PP is still present, it is simply devoid of phonetic content, in other words, the genitive, dative, and instrumental cases are still assigned by a PP—the head of which can be covert or overt. The lexical case-marked arguments with these verbs do not therefore constitute 'bare' lexical cases, provided the basic meaning of the verb remains the same whether it occurs with the overt preposition or with the genitive, dative, or instrumental argument (i.e. the covert preposition).

<sup>24</sup> This verb can also occur with the instrumental case-assigning preposition *nad* + INSTR 'over/on.'

<sup>25</sup> All of the native speakers I interviewed accepted the PP *do* + genitive case with this verb, although some claimed that they were probably more likely to use it without the PP.



Second, for our purposes, ‘bare’ lexical case-marking does not include those lexical cases assigned by a prefix, just as it does not include those lexical cases assigned by a preposition. In all of the examples discussed thus far, the prefix did not affect the C/case assigned by the base verb. It is common knowledge, however, that merging a prefix with a verb can change the C/case assigned to the internal argument, just as it can also affect the argument structure of a base verb (Babko-Malaya 1999; Ramchand 2004). Consider the following four possible ways in which a prefix can interact with the argument structure and C/case assignment possibilities of a base verb:

- (i) the prefix has no effect on the argument structure or C/case assignment properties of the base verb, e.g.:

|                               |                     |          |
|-------------------------------|---------------------|----------|
| <i>gardzić</i> + INSTR        | ‘to despise, scorn’ | (Polish) |
| <i>po-gardzić</i> -PF + INSTR | ‘to despise, scorn’ |          |
| <i>wz-gardzić</i> -PF + INSTR | ‘to reject, spurn’  |          |

- (ii) the prefix requires an argument and that argument is assigned the accusative C/case, e.g.:

|                                  |                                                          |              |
|----------------------------------|----------------------------------------------------------|--------------|
| <i>plysci</i>                    | ‘to swim’ (intransitive)                                 | (Belarusian) |
| <i>pera-plysci</i> + ACC         | ‘to swim across’                                         |              |
| <i>strzec</i> + GEN              | ‘to guard, keep watch’                                   | (Polish)     |
| <i>o-strzec</i> + ACC            | ‘to warn’                                                |              |
| <i>poniewierać</i> -IMPF + INSTR | ‘to hold in contempt, kick someone around, to manhandle’ |              |
| <i>s-poniewierać</i> -PF + ACC   | ‘to hold in contempt, kick someone around, to manhandle’ |              |

- (iii) the prefix requires an argument in the genitive, dative, or instrumental case, e.g.:

|                                                         |                                          |             |
|---------------------------------------------------------|------------------------------------------|-------------|
| <i>begat’</i>                                           | ‘to run’ (intransitive)                  | (Russian)   |
| <i>iz-begat’/iz-begnut’</i> ,<br><i>iz-bežat’</i> + GEN | ‘to avoid’                               |             |
| <i>koryty</i> + ACC                                     | ‘to subjugate, conquer,<br>scold, blame’ | (Ukrainian) |
| <i>do-korjaty/do-koryty</i> + DAT                       | ‘to reproach’                            |             |
| <i>držet</i> + ACC                                      | ‘to hold’                                | (Czech)     |
| <i>na-držovat/na-držet</i> + DAT                        | ‘to favour’                              |             |

- (iv) the prefix requires a PP, QP, or ApplicP argument, e.g.:
- |                                     |                                                    |           |
|-------------------------------------|----------------------------------------------------|-----------|
| <i>brat'</i> + ACC                  | 'to take'                                          | (Russian) |
| <i>na-brat'</i> + NP-ACC/<br>QP-GEN | 'to gather (much/many<br>if QP-GEN)' <sup>26</sup> |           |

These examples illustrate that like prepositions, a prefix can select an argument and it can assign C/case. Furthermore, the case assigned by a prefix can be just as random as those assigned by lexical case-assigning base verbs. Notice, for instance, that in Czech the addition of the prefix *roz-* to the verb *umět* 'to be able' creates a verb phrase meaning 'to understand' which assigns the dative case, that is, *roz-umět* + DAT 'to understand', whereas the verb 'to understand' in Russian, among other languages, assigns the accusative Case (e.g. *ponimat'*/*ponjat'* + ACC).

I assume that when the prefix phrase has a C/case feature, it assigns (or values) C/case in the same manner as C/case is assigned (or valued) by the head of a PP. The prefix phrase can clearly override any of the C/case-assigning properties of the base verb, including those of lexical case-assigning verbs. This pattern finds a direct correlate in the prepositional system. Notice, for instance, that a PP can override the lexical case assigning properties of the following base verbs (among others):

- (45) *Belarusian*:
- |    |                                                      |                         |
|----|------------------------------------------------------|-------------------------|
| a. | <i>ljubavacca</i> + INSTR                            | 'to admire'             |
| b. | <i>pa-ljubavacca</i> + PP ( <i>na</i> + ACC)/+ INSTR | 'to admire for a while' |
- (46) *Ukrainian*:
- |    |                                                               |                                            |
|----|---------------------------------------------------------------|--------------------------------------------|
| a. | <i>pikluvatysja</i> + INSTR                                   | 'to take care of,<br>provide for, protect' |
| b. | <i>pikluvatysja</i> + PP ( <i>pro</i> + ACC/ <i>za</i> + ACC) | 'to take care of'                          |
- (47) *Czech*:
- |    |                                        |                     |
|----|----------------------------------------|---------------------|
| a. | <i>vadit</i> + DAT                     | 'to hinder, impede' |
| b. | <i>za-vadit</i> + PP ( <i>o</i> + ACC) | 'to brush against'  |
- (48) *Slovak*:
- |    |                                                    |                                    |
|----|----------------------------------------------------|------------------------------------|
| a. | <i>týkat'</i> <i>sa/týknut'</i> <i>sa</i> + GEN    | 'to touch, concern' [rare/archaic] |
| b. | <i>s-týkat'</i> <i>sa</i> + PP ( <i>s</i> + INSTR) | 'to meet, adjoin'                  |

<sup>26</sup> See Pereltsvaig (2006) for evidence that the prefix *na-* can select a QP argument, which in turn values the genitive Case.

A PP can also override the Case-assigning properties of a base verb that assigns the accusative Case, as is clear in examples like Russian *vozveščat’/vozvestit’ čto-ACC* ‘to proclaim/announce something’ versus *vozveščat’/vozvestit’ o čem-PREP* ‘to proclaim/announce something’ (e.g. *vozveščat’/vozvestit’ pobedu-ACC/o pobede-PREP* ‘to proclaim a victory’). Thus, a prefix phrase can override the C/case assignment properties of the base verb in the same way as a PP can. This means that lexical cases are obligatory in the sense that they take precedence over structural or structural/semantic C/cases. They can, however, be superseded if a PP or PrefixP is merged in a derivation. Crucially, the generalization that all lexical case-assigning verbs are atelic and their event structure is never compositional holds for ‘bare’ lexical case assignment by a base verb, that is, it does not include the lexical cases assigned by prefixes and prepositions. A number of base verbs that assign the accusative Case, for instance, merge with prefixes that assign a genitive, dative, or instrumental case, yet the event structure of the base verb is compositional; thus, the prefixed verb could be telic or atelic, regardless of the C/case assigned (or valued) by the prefix (or a PP, QP,<sup>27</sup> or ApplicP selected by the prefix). Furthermore, a number of lexical case-assigning base verbs merge with prefixes that assign the accusative Case (or another case). The base verb itself, however, is atelic and its event structure is not compositional; thus, an accusative Case-assigning prefix will not affect the atelicity of a lexical

<sup>27</sup> Pereltsvaig (2006) claims that the prefix *na-* in Russian, for instance, can select a QP which in turn values the genitive Case on an argument. It is well-known that the prefix *na-* enables a verb to take a genitive Case-marked argument in a number of Slavic languages, often when that argument is a mass or plural term, but not a count term. The addition of this prefix and a genitive Case-marked argument adds to the verb the meaning of a sufficient or large measure, quantity, or high degree. Examples (i) and (ii) illustrate this pattern in Russian.

- i. Ona        na-brala        gribov.  
    she-NOM collected-PF mushrooms-GEN  
    ‘She collected many mushrooms.’
- ii. Ona        na-brala        korzinu        gribov.  
    she-NOM gathered-PF basket-ACC        mushrooms-GEN  
    ‘She collected a basket of mushrooms.’

I follow Pereltsvaig (2006) in the claim that the genitive argument in an example like (i) is linked to the existence of a QP, i.e. it is not a ‘bare’ lexical case-marked argument. Crucially, there are no examples of *na-*prefixes affecting the atelicity of lexical case-assigning base verbs, as expected. The one potential counterexample to this claim is the verb *ljubavacca + INSTR* ‘to admire’ ~ *na-ljubavacca + INSTR* ‘to admire to one’s heart’s content’ in Belarusian, although native speakers exhibited some discrepancy as to whether the ‘in X time’ adverbial was possible with *na-ljubavacca*, with some changing a construction with *na-ljubavacca* and the ‘in X time’ adverbial to *skončyc ljubavacca za X time* ‘to finish admiring in X time’. I therefore leave the status of this verb open for the time being.

case-assigning base verb.<sup>28</sup> What is therefore crucial for our purposes is that a prefix phrase does not affect the atelicity of the lexical case-assigning base verb (even though it can affect the C/case and argument structure properties of the verb phrase), whereas it can affect the event structure of a base verb which assigns an accusative Case (in addition to the argument structure and C/case-assigning properties of the verb).

Thus far it should be clear that what is crucial for our purposes is that the event structure of a (bare) lexical case-assigning base verb is not compositional. That is, the atelicity of these verbs is never affected by elements such as an internal argument or lexical prefixes. The event structure of accusative Case-assigning base verbs, on the contrary, is compositional. In the following section I address potential counterexamples to this claim before turning to the syntax of event structure and Case in the Slavic languages.

### 3.3 Potential counterexamples

There are a very small number of counterexamples to the claims put forth thus far in this chapter. Some potential counterexamples include: the telic verb *dostigat'*/*dostignut'*~*dostič'* 'to reach/to achieve' in Russian which assigns a lexical genitive case, contrary to expectation; the *reflexiva tantum* verbs *bojat'sja* and *bojatysja* 'to fear' in Russian and Ukrainian, respectively, and *używać/użyć* 'to use' in Polish, which can all assign the genitive or accusative C/case and this C/case alternation does not appear to be linked to a semantic contrast; and 'reflexive' S- verbs that merge with lexical case-marked arguments. In what follows I will illustrate that none of these constitute strong counterexamples to the claims put forward in this chapter. I will show that there are really only four true counterexamples to the patterns outlined above across all the Slavic languages. These four counterexamples, I will maintain, are not sufficient to undermine the overwhelming general pattern that the accusative Case in the Slavic languages is 'aspectually relevant'.

Consider first the telic genitive case-assigning verb *dostigat'*/*dostignut'*~*dostič'* 'to reach/to achieve' in Russian. This verb does not fit into the pattern that all lexical case-assigning base verbs are atelic. The genitive case with this verb could, however, arguably be an historical relic of a larger general tendency that exists in all the Slavic languages, whereby

<sup>28</sup> I assume that prefix phrases can value structural accusative Case in the same way that PPs can. See Babby (1980a) and Franks (1994) for the claim that some PPs value an accusative structural Case, at least in Russian.

the addition of the prefix *do-* (*da-* in Belarusian (49)) to certain base verbs changes the meaning of these verbs such that they focus on the attainment of a goal, that is, they are accomplishments,<sup>29</sup> and this prefix assigns the genitive case. I refer to this genitive as the GENITIVE OF ACHIEVEMENT. The following examples illustrate that this phenomenon exists across the Slavic languages (the following examples are obviously not meant to be exhaustive).

- (49) *Belarusian:*
- a. *bic'* (/bic-ca) + ACC 'to beat (/to fight)'
  - b. *da-bivac-ca/da-bic-ca* + GEN 'to get, obtain, secure'
- (50) *Russian:*
- a. *stat'*
    - i. 'to stand/take up position/stop/cost'
    - ii. 'to begin/become'
  - b. *do-stavat'/do-stat'* + GEN 'to reach' (PP *do* + GEN also possible)
- (51) *Ukrainian:*
- a. *šukaty* + PP 'to look for, search for'
  - b. *do-šukaty(-sja)* + GEN 'to find/discover'
- (52) *Czech:*
- a. *moci* 'to be able' (modal verb)
  - b. *do-moci se* + GEN 'to achieve'
- (53) *Polish:*
- a. *kopać* + ACC 'to dig'
  - b. *do-kopywać/do-kopać* + GEN 'to dig down to' (PP *do* + GEN also possible)
  - c. *sięgnąć/sięgać* + PP 'to reach'
  - d. *do-sięgać/do-sięgnąć* + GEN 'to reach'
- (54) *Slovak:*
- a. *môct'* 'to be able'
  - b. *do-máhat' sa/do-môct'*  
*sa* + GEN 'to achieve, attain'
  - c. *žiť* 'to live'
  - d. *do-žiť' sa* + GEN 'to live to see'

<sup>29</sup> It is also quite common for this prefix to assign the genitive case in general, e.g. Belarusian *dac'* + ACC + DAT 'to give' versus *da-dac'* + GEN 'to add to'.

What is unusual about the Russian verb *dostigat'*/*dostignut'*~*dostič'* + GEN 'to reach/to achieve', however, is that the unprefixed base verbs \**stigat'*, \**stignut'* or \**stič'* do not exist; thus, we cannot claim that the preposition is assigning the genitive case (in the modern language). We know, however, that the verb *stiči* (>*stič'*) existed as a base verb at one stage in the language, since it is attested in the *Dovogornaja gramota* (1399) (cited in Sreznevskij 1903, vol. 3: 515). This suggests that prefixation of *do-* to the verb *stiči* could once have belonged to the general pattern found throughout most of the Slavic languages, namely the prefix *do-* assigned the genitive of achievement to its NP argument. This would mean that the modern Russian verbs *dostigat'*/*dostignut'*~*dostič'* + GEN 'to reach/to achieve' constitute an historical relic. Historical relics should not strike us as surprising. A grammar arises from the confrontation of the human language acquisition device to the linguistic data to which it is exposed. These data obviously encode layers of change. I therefore do not treat the odd historical relic as sufficient to undermine the general patterns outlined here.

It is also possible that the verbs *dostigat'*/*dostignut'*~*dostič'* in their meaning 'to reach' select a PP which can be overt or covert, since most native speakers accept both of the following constructions in Russian:

- (55) Ja dostigla do veršiny.  
 I reached to summit-GEN  
 'I reached the summit.'
- (56) Ja dostigla veršiny.  
 I reached summit-GEN  
 'I reached the summit.'

These examples suggest that the genitive case on the internal argument could be assigned by the head of a PP, which in turn can be covert or overt, that is, the genitive case is not a true 'bare' lexical case. This pattern is also found in Belarusian and Ukrainian, for example Belarusian *da-sjagac'*/*da-sjagnuc'* + GEN/*da* + GEN 'to achieve, reach' (built on the base verbs *sjagac'*/*sjagnuc'* + GEN/*da* + GEN 'to go, move'), and Ukrainian *sjagaty/sjagnuty* + GEN/*do* + GEN 'to reach'. As mentioned above, I do not treat these types of verbs as true lexical case-assigning verbs, that is, verbs that can merge with either a covert or overt PP which in turn assigns a lexical case. That the verbs *dostigat'*/*dostignut'*~*dostič'* potentially merge with a lexical case-assigning PP, rather than a true bare lexical case-marked argument also suggests that the existence of this telic genitive case-assigning verb in Russian should not be taken as a strong counterexample to the link between atelicity and (bare) lexical case morphology.

As mentioned above, there are also a couple of verbs in the Slavic languages that appear to have an alternation between accusative versus lexical C/case on their arguments and this alternation is not clearly related to a semantic contrast.<sup>30</sup> These verbs include, for instance, *bojat'sja* + GEN/ACC and *bojatsjsja* + GEN/ACC 'to fear' in Russian and Ukrainian, respectively (e.g. Russian *bojat'sja mamy*-GEN/*mamu*-ACC 'to fear Mum'), and *używać/użyć* + GEN/ACC 'to use' in Polish (e.g. *użyć drukarki*-GEN/*drukarkę*-ACC 'to use the printer'). If we look at the prefixation possibilities with these base verbs, however, it becomes apparent that we would expect the accusative Case to be possible, since they all combine with telicizing prefixes. The verbs *bojat'sja* (Russian) and *bojatsjsja* (Ukrainian), for example, can combine with the prefix *pere-*, creating the telic verb phrase 'to stop fearing'. In all the other Slavic languages, the genitive case is obligatory with the verb meaning 'to fear' and, as expected, no telicizing prefix is possible with these verbs, as the following examples illustrate:

- (57) *Belarusian*:<sup>31</sup>
- a. *bajacca*-IMPF + GEN 'to fear'
  - b. *z-bajacca*-PF + GEN 'to take fright'
  - c. *pa-bajacca*-PF + GEN 'to experience some fear'
- (58) *Russian*:
- a. *bojat'sja*-IMPF + GEN/ACC 'to fear'
  - b. *za-bojat'sja*-PF + GEN 'to become afraid of' [rare]
  - c. *pere-bojat'sja*-PF + GEN 'to stop being afraid' [rare]
- (59) *Ukrainian*:
- a. *bojatsjsja*-IMPF + GEN/ACC 'to fear'
  - b. *pere-bojatsjsja*-PF + GEN 'to stop fearing' [rare]
  - c. *po-bojatsjsja*-PF + GEN 'to experience fear towards'
- (60) *Czech*:
- bát se*-IMPF + GEN 'to fear'

<sup>30</sup> Recall from chapter 2 that some C/case marking alternations in the Slavic languages are motivated by semantic features such as animacy, definiteness, and notions like abstract versus concrete. As mentioned in chapter 2, I do not treat genitive, dative, or instrumental arguments involved in an alternation based on semantic features as true bare lexical case-marked arguments.

<sup>31</sup> There was some disagreement among native speakers as to whether the verb *pera-bajacca* exists in Belarusian with the meaning 'to stop fearing'. One speaker claimed it exists, whereas four others claimed it did not or that it was completely artificial. For the time being, I therefore leave the status of this verb open.

- (61) *Polish:*  
 a. *bać się*-IMPF + GEN 'to fear'  
 b. *po-bać się*-PF + GEN 'to fear for some time'
- (62) *Slovak:*  
 a. *bát' sa*-IMPF + GEN 'to fear'  
 b. *za-bát' sa*-PF + GEN 'to begin to fear'
- (63) *BCS:*  
 a. *bojati se*-IMPF + GEN 'to fear'  
 b. *po-bojati se*-PF + GEN 'to fear, worry'

Notice that the verb for 'to fear' has an accusative–genitive alternation on its internal argument only in Russian and Ukrainian. Notice also that the base verb in these two languages alone has the potential to be telic, by merging with a lexical prefix which means 'to stop/cease doing'. Polish exhibits a similar pattern to Russian and Ukrainian with its verb *używać/użyć* + GEN/ACC 'to use'.<sup>32</sup> This verb can merge with the telicizing prefix *z-* creating the verbs *z-używać/z-użyć* + ACC 'to use up/wear out'. It does not seem unreasonable to assume that the spread of the accusative Case with these verbs is linked to the status of the verb as one whose event structure has the potential to be compositionally determined. In fact, in the absence of strong prescriptive norms regulating the use of the genitive case, we might expect the genitive to be completely displaced by the accusative. This is precisely what has happened with the verbs *potrzebować* 'to need' and *straszyć* 'to frighten' in Polish. These verbs used to assign the genitive case, but now merge with an accusative Case-marked argument (none of my native informants accepted the genitive case with these verbs). This change in C/case assignment is to be expected, given that these verbs can merge with telicizing prefixes, for example *potrzebować* can merge with the prefix *wy-* creating the telic verb phrase *wy-potrzebować* 'to use up, spend'<sup>33</sup> and *straszyć* can merge with the prefix *od-* creating the telic verb phrase *od-straszyć* 'to scare off, drive away'. Thus, I assume that the existence of both accusative and lexical C/case-marked arguments with the verbs in Russian, Ukrainian, and Polish above is linked to the status of the base verb as one whose event structure is potentially compositionally determined. I also assume that the existence of two possible C/case endings on the

<sup>32</sup> According to my native informants, the accusative is more common in the spoken language with these verbs.

<sup>33</sup> This verb was accepted by older generations of Polish speakers, who claimed it was common in the 1920s and 1930s. It was also accepted by some younger speakers (in their 20s) as colloquial or 'common'. A search online produced a number of examples of its use.



internal argument with these verbs represents a transitional state of affairs, and that the lexical case is reinforced in part by the prescriptive tendencies of the grammars and dictionaries.<sup>34</sup>

In essence, to my knowledge there are only four real counterexamples across the Slavic languages to the claim that all (two-place) lexical case-assigning base verbs are atelic and their event structure is never determined compositionally, namely the prefixed forms of the base verb built on the root *vlad-* (*valod-* in Belarusian) in the Slavic languages, two prefixed verbs in Polish, one prefixed verb in Czech and Slovak, and the verb *všimnout si*-PF ‘to pay attention to/to notice’ in Czech, which is arguably an accomplishment (i.e. some speakers, although not all, accepted the ‘in X time’ adverbial with this verb).<sup>35</sup> The verb *vladet* ‘to own, possess’ in Russian, for example, assigns a lexical instrumental case to its internal argument. This verb, however, can merge with the prefix *o-* thereby creating the telic verb phrase ‘to master’ (e.g. *Natasha o-vladelá russkim jazykom-INSTR za pjat’ let* ‘Natasha mastered the Russian language in five years’);<sup>36</sup> thus, this verb constitutes a counterexample to the claim that lexical case-assigning verbs do not merge with telicizing prefixes. This pattern occurs with this root across the Slavic languages. In Belarusian, for instance, *valodac* + INSTR ‘to own, possess/to control’ merges with the prefix *a-* creating the telic verb *a-valodac* + INSTR ‘to master’. Interestingly, in Czech, Slovak, and BCS, once a telicizing prefix is merged with this root, the verb phrase assigns the accusative Case, for example: Czech *vládnout* + DAT ‘to rule, govern, reign, dominate, control’ but *o-vládnout* + ACC ‘to master/control’, *z-vládnout* + ACC ‘to master/defeat/tame’; Slovak *vládnut* + INSTR ‘to own, possess, wield’, but *o-vládat*’/*o-vládnut*’ + ACC ‘to master’, *pre-vládat*’/*pre-vládnut*’ + ACC ‘to overcome, conquer’, *z-vládat*’/*z-vládnut*’ + ACC ‘to master/cope’; and BCS *vladati* + INSTR ‘to rule’, but *sa-vladati* + ACC ‘to overcome, surmount’, and *nad-vladati* + ACC ‘to overwhelm, overpower, overcome.’ The association of the accusative Case with the telic verbs is what we might expect. The compositional event structure of the base verbs built on the root *vlad-* (*valod-*), however, does constitute an exception

<sup>34</sup> Russian exhibits an opposite tendency with the verb *veršit*-IMPF ‘to manage, control, decide’. That is, this verb used to assign only the accusative Case to its argument, but can now also assign the lexical instrumental case. The event structure of the verb *veršit* is compositional, i.e. this base verb can merge with the telicizing prefixes *za-* and *do-*, resulting in the telic verb phrases *za-veršit*’ and *do-veršit*’ ‘to complete’. I assume that the optional instrumental case with this verb has arisen via analogy to the fairly numerous instrumental case-assigning verbs of governing and controlling in Russian.

<sup>35</sup> Ukrainian also has the three-place verb *škoduvaty* ‘to grudge/begrudge’ which assigns a lexical genitive case to one of its arguments and an inherent dative case to the other. This verb can merge with the prefix *vid-* creating the telic verb phrase *vid-škoduvaty* + ACC ‘to refund, reimburse’. We would also expect this three-place base verb to merge with an accusative Case-marked internal argument given its compositional event structure.

<sup>36</sup> I thank Wayles Browne for drawing my attention to this verb in Russian.

to the generalization that the event structure of lexical case-assigning verbs is not compositional. These telic prefixed verbs might constitute an exceptionally rare example of verbs that are listed as separate lexical items from their base verb in the lexicon.

There are three other candidates that also qualify for this exceptional status. The verb *szukać* + GEN 'to search for' in Polish can merge with one (arguably two) telicizing lexical prefixes: for example, merging with the prefix *prze-* creates the verb *prze-szukać* + ACC 'to search, comb, go through', which native speakers accepted with the 'in X time' adverbial, and merging with the prefix *od-* (arguably) creates the telic verb phrase *od-szukać* + ACC 'to find', although native speakers did not accept the 'in X time' adverbial with this latter verb. The lexical case-assigning base verbs *stranit* + DAT (Czech) and *stránit'* + DAT (Slovak) 'to take someone's side/favour' also merge with the prefix *od-* creating the telic verbs *od-stranit* + ACC (Czech) and *od-stránit'* + ACC (Slovak) 'to remove', which are grammatical with the 'in X time' adverbial (e.g. Czech *Od-stranil tu skvrnu-ACC za pět minut* 'He removed the stain-ACC in five minutes').

I assume that these counterexamples are not sufficient to undermine the patterns presented here, especially when we bear in mind how many languages are under analysis and the numerous prefixes which can combine with lexical case-assigning verbs. The overwhelming pattern is clearly that lexical case-assigning verbs are atelic and their event structure is not compositional. For the time being, I assume that the anomalous telic prefixed verbs occur within the lexicon, that is, they constitute extremely rare examples of separate lexical items, which are not syntactically derived from the same lexical case-assigning base.

There is one remaining pattern in the Slavic languages that warrants discussion before I turn to the syntax of Case and event structure in the Slavic languages, namely the status of C/case-marking patterns with 'reflexive' S- verbs.

**3.3.1 Reflexive S- verbs** All the Slavic languages have 'reflexive' S-verbs, that is, verbs with a clitic/particle/affix beginning in S-. This clitic/particle/affix creates a wide variety of different types of verbs, including true reflexives, reciprocals, passives, middles, and unaccusatives, among others. Some S-verbs also constitute *reflexiva tantum* verbs, that is, they have no counterpart without S-. The examples under (64)–(67) below illustrate some (not all) of the different types of S-verbs in Polish.<sup>37</sup>

<sup>37</sup> For a detailed description of S-verbs in Polish see Kubiński (1987) and Sawicki (1988). For their syntax see Golezdzinowska (2004), Kański (1986), and Rivero and Sheppard (2003), among others. For a description of S-verbs in Russian, see Gerritsen (1990), Timberlake (2003), and Townsend (1967). For

- (64) *Reflexives*:  
a. *ustrzec* + ACC ‘to defend someone/something’  
b. *ustrzec się* ‘to defend oneself’
- (65) *Reciprocals*:  
a. *całować* + ACC ‘to kiss’  
b. *całować się* ‘to kiss each other’
- (66) *Unaccusatives versus transitives*:  
a. On zamknął okno. transitive  
he-NOM closed window-ACC  
‘He closed the window.’  
b. Okno zamknęło się. unaccusative  
window-NOM closed REFL  
‘The window closed.’
- (67) *Reflexiva tantum*:  
a. *opiekować się* + INSTR ‘to tend, care for’  
b. *starać się* ‘to try’

The only reflexive S-verbs I treat as true two-place lexical case-assigning verbs in the Slavic languages are *reflexiva tantum* verbs (i.e. those verbs that do not have a non-reflexive counterpart), and those verbs whose non-reflexive ‘counterpart’ differs significantly in meaning from the reflexive verb.<sup>38</sup> These lexical case-assigning S-verbs exhibit the patterns discussed throughout this chapter, that is, they are all atelic and their event structure is never compositional, as the S-verbs in the appendix at the end of this book demonstrate.

It is common knowledge that a number of other types of reflexive S-verbs can merge with a lexical case-marked argument, for example BSC *domoći se* + GEN ‘to manage, to get, to lay one’s hands on’ and *dograbiti se* + GEN ‘to claw one’s way to something (e.g. a position/job)’. These verbs all have a non-reflexive counterpart that merges with an accusative Case-marked internal argument, for example BCS *domoći* + ACC ‘to reach’ and *dograbiti* + ACC ‘to grab’. I treat the reflexive S- verb counterparts of these verbs as three-place predicates. I follow Babby and Brecht (1975) in the claim that (for non-*reflexiva tantum* verbs) S- marks the dislocation or absence of an NP from its ‘expected’

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a discussion of their syntax, see Babby (1974), Babby and Brecht (1975), Fowler (1993), Franks (1995), Levine and Jones (1996), and Schoorlemmer (1997), among others. For some discussion of S-constructions in Czech, Slovak and BCS, see Rivero and Sheppard (2002).

<sup>38</sup> I use the term REFLEXIVE with these S-verbs as a catch-all term that covers all the different types of constructions in which they occur.

position as an accusative internal argument or nominative external argument (an assumption that is inherent in many later works on S- verbs in the Slavic languages).<sup>39</sup> That is, S- is a marker that ‘tells us something about the basic relations of a sentence, a guide to its fundamental internal structure’ (Klenin 1975: 197). In the lexical/semantic literature, clitics/particles/affixes equivalent to S- in the Slavic languages have been treated as valence-reducing morphemes that suppress one argument in the lexicon (Reinhart 1996; and Reinhart and Siloni 2004, among others). In syntactic terms, I assume that reflexive S- verbs in the Slavic languages do not constitute distinct lexical entries from their non-reflexive counterparts (unless they differ significantly in meaning, as discussed above). In the spirit of Borer (2005b), I assume that there is one (base) verb, but that this verb can project different structures, depending on a given construction. Borer (2005b), for instance, suggests that nominals and verbs should be treated identically, that is, as constituting one lexical item, regardless of their interpretation as generic, (in)definite, or as existentials in the case of nominals, or as transitive, intransitive, or middles in the case of verbs. As Borer notes, the different properties of a nominal like generic ‘cats’ versus existential ‘cats’ is thought to be the result of the semantic or syntactic structure in which the lexical item ‘cats’ occurs. She suggests that the same basic assumptions should direct us when trying to understand the behaviour of lexical items in the verbal domain, such as a verb’s ability to alternate between a transitive, intransitive, or middle construction (e.g. the verb *break* in English). This hypothesis is also directly relevant to S-verbs in the Slavic languages that alternate with a non-reflexive counterpart.

The exact syntactic operations associated with all the different manifestations of S-constructions across the Slavic languages is beyond the scope of this book. What is crucial for our purposes is that any telic S-verbs or S-verbs whose event structure is compositionally determined that appear to merge with lexical case-marked arguments in the Slavic languages actually consist of a non-reflexive S-verb that can assign the accusative Case. True two-place lexical case-assigning S-verbs never have a non-reflexive accusative Case-assigning counterpart. Any lexical case-marked argument that occurs with telic S-verbs and S-verbs whose event structure is compositional therefore essentially constitutes a third argument, as is particularly clear in examples like Belarusian *padparadkavac’* + ACC + (inherent) DAT ‘to submit someone/something to

<sup>39</sup> Czech also has reflexive *si* verbs, whereby *si* represents a type of indirect object which often means ‘for oneself’, e.g. *koupit* + ACC ‘to buy’ versus *koupit si* + ACC ‘to buy for oneself’. It also has lexicalized *si* verbs with which *si* does not convey a meaning along the lines of ‘for oneself’. I only treat lexicalized *si* verbs as two-place lexical case-assigning base verbs (if they merge with a lexical case-marked argument).

someone/something' versus *padparadkavac-ca* + (inherent) DAT 'to submit to', and Russian *dostavat'/dostat'* + ACC + (inherent) DAT 'to get/obtain' versus *dostavat'-sja/dostat'-sja* + (inherent) DAT 'to pass to (by inheritance)/to fall to one's lot'.<sup>40</sup> I assume that any lexical case marking that arises on a third argument with reflexive S-verbs belongs to a different phenomenon from the patterns discussed throughout this chapter, namely it arises due to a constraint on linearization at the PF-syntax interface (N. Richards 2002). Richards (2002) develops a theory of linearization which predicts that multiple syntactic nodes with the same label are impossible to linearize at the syntax-phonology interface if they are close together in a structure. In general there is a tendency in the Slavic languages to avoid the combination ACC-ACC on nominals with similar syntactic and semantic functions. I assume therefore that in the Slavic languages under analysis two adjacent NPs (/DPs) with the same C/case marking (and same basic syntactic and semantic function) will generally fail to obey linearization at the PF-syntax interface. Notice, for instance, that while examples (68) and (69) below are grammatical in Russian, we cannot combine the two instrumental case-marked NPs with the same basic semantic function to produce (70) (see Channon 1987 for further discussion and more examples of this phenomenon).<sup>41</sup>

- (68) Olen'            byl    ubit    oxotnikom.  
 Deer-NOM    was    killed    hunter-INSTR  
 'The deer was killed by the hunter.'

- (69) Olen'            byl    ubit    streloj.  
 deer-NOM    was    killed    arrow-INSTR  
 'The deer was killed by an arrow.'

- (70) \*Olen'    byl    ubit    oxotnikom    streloj.  
 deer    was    killed    hunter-INSTR    arrow-INSTR  
 '(To mean) The deer was killed by a hunter by/with an arrow.'  
 (Channon 1987: 339)

<sup>40</sup> It is important to note that I do not assume all S-verbs are the result of an operation linking them to a non-reflexive counterpart, as is clear from the existence of *reflexiva tantum* verbs, but also from the existence of circumfix prefixation in the Slavic languages. I follow Ludwig (1995) in assuming that some prefixes in the Slavic languages actually constitute circumfixes, i.e. the addition of S- is obligatory with certain prefixes. This includes, for instance, *na~sja* verbs in Russian: the addition of the prefix *na-* with certain verbs also obligatorily requires the addition of the affix *-sja*. Notice that these verbs do not involve the 'reduction' of an argument, as is clear from the alternation between *komandovat' diviziej-INSTR* 'to command a/the division' versus *na-komandovat'-sja diviziej-INSTR* 'to have one's fill commanding a/the division'.

<sup>41</sup> See Richardson (2003a: 210–11) for discussion of why some multiple genitive NPs do not fail linearization.

Thus, lexical case-marked arguments in reflexive S-constructions occur in the genitive, dative, or instrumental case due to a distinctness condition on linearization, that is, due to a tendency to avoid any association of a given verb with the Case-marking pattern NP+ACC–NP+ACC.<sup>42</sup> Reflexive S-verbs do not therefore undermine the claim that two-place lexical case-assigning base verbs in the Slavic languages are atelic and their event structure is never compositional.

#### 4. The syntax of Case and lexical aspect in the Slavic languages

My goal in this section is to provide a syntactic account which captures the pattern outlined above that accusative Case-marked arguments in the Slavic languages are, in a sense, ‘aspectually relevant’, whereas lexical case-marked arguments are not: that is, the pattern that only accusative Case-marked arguments occur with base verbs whose event structure is compositionally determined, whereas lexical case-marked arguments occur with (two-place) atelic base verbs whose event structure is never compositional. In what follows, I will suggest that the accusative Case is linked to the featural composition of *v*, namely it is linked to whether *v* has a [quantized] feature it needs to value in the syntax. This [quantized] feature signals that the event structure of the base verb is compositional. This hypothesis builds on proposals which claim that functional categories within the extended projection of a predicate include event structure information (Borer 1994, 2005a, 2005b; Travis 2000; and Ritter and Rosen 2000, among many others). Perhaps the most crucial syntactic assumption necessary to understand in the following analysis is the feature-valuing operation I adopt. In the following section I therefore clarify my assumptions about feature valuing before turning to an analysis of the syntax of Case and lexical aspect in the Slavic languages.

<sup>42</sup> Expected exceptions to this generalization occur with *reflexiva tantum* verbs, since S- with these verbs does not signal the ‘reduction’ of an accusative nominal, hence the grammaticality of Russian *bojat’sja* + ACC/GEN and Ukrainian *bojatsja* + ACC/GEN ‘to fear’. The verb *slušať-sja* + GEN/ACC ‘to obey’ in Russian appears to be transitional in that, like *reflexiva tantum* verbs, an accusative argument is possible with this verb for some speakers (e.g. *slušať-sja mamu*-ACC ‘to obey mum’), and like derived reflexive S-verbs the genitive case is also possible (e.g. *slušať-sja mamy*-GEN ‘to obey mum’, derived from the base verb *slušať* + ACC ‘to listen’). Belarusian exhibits a similar pattern, whereby some speakers only accept *sluxacca* + ACC ‘to obey’ (*reflexiva tantum*) and others only accept *sluxac-ca* + GEN ‘to obey’ (based on *sluxac* + ACC ‘to listen’). Croatian also has an accusative Case-marked argument after the non-*reflexiva tantum* verb *varati se* + ACC ‘to cheat’ (cf. *varati* + ACC ‘to cheat’). (I am grateful to Wayles Browne for bringing my attention to this counterexample in Croatian.) Ukrainian also has an accusative argument after *dyvyty-sja* ‘to watch’. Finally, Czech, Slovak, and BCS also allow the NP+ACC–NP+ACC pattern with the verb *teach* based on the root *uč-*, as discussed in chapter 2. These exceptions are all extremely rare and are insufficient to undermine the overwhelming general pattern that NP+ACC–NP+ACC is ruled out in the Slavic languages.

4.1 *Feature valuing*

As is well known, many syntacticians follow Chomsky (2001) in assuming that Case in language is valued via Agree, defined under (71) below.

(71) *Agree* (Chomsky 2000: 101)

Establishes a relation (agreement, Case-checking) between a lexical item (LI)  $\alpha$  and a feature F in some restricted search space (its *domain*).  
Matching of Probe–Goal induces AGREE.

Agree is essentially a feature-matching relationship between two elements in the syntax—an element with an uninterpretable feature and one with an interpretable feature (i.e. a feature necessary for semantic interpretation). The element specified with an uninterpretable feature is referred to as a PROBE, the element with an interpretable feature, a GOAL. It is generally assumed that a probe enters into an Agree relationship with a goal because the probe has an uninterpretable feature it needs to value. This same feature is interpretable on the goal. It is also assumed that both probe and goal must be active for Agree to operate, that is, they must both have at least one uninterpretable feature they need to value. Matching of the uninterpretable feature on the probe with the interpretable feature on the goal is said to induce Agree. Chomsky suggests that probes themselves are not specified with a Case feature, that is, Case features are uninterpretable, but unlike other uninterpretable features they are not matched with an interpretable feature in the syntax. Instead, he posits that Case is valued as a sort of ‘side effect’ (or ‘bonus’) when the uninterpretable phi-features of T are valued (for nominative Case) or the uninterpretable object phi-features of *v* are valued (for accusative Case).

Recently Pesetsky and Torrego (2004) have suggested that uninterpretable features and unvalued features should be treated separately. It is obvious, for instance, that agreement takes place between items in a derivation, but it is not so clear that this agreement should always be linked to uninterpretable or interpretable features, that is, to features necessary for semantic interpretation. Consider, for instance, the example below which they provide from Latin:

- (72) Haec                      puella                      Romana                      ambulat.  
       this-NOM.FEM.SG   girl-NOM.FEM.SG   Roman-NOM.FEM.SG   walks-3.SG  
       (Pesetsky and Torrego 2004: 1)

In this example, phi-feature agreement occurs between the determiner, the noun, and the adjective, and between the DP and the finite verb. As Pesetsky and Torrego note, not all of these agreement features are necessary for semantic interpretation: the DP provides sufficient information about gender, number, and person. They suggest that agreement might involve features

of lexical items that differ along two different dimensions: valued versus unvalued features and interpretable versus uninterpretable features. Certain features on lexical items, for example, might come from the lexicon unvalued and receive a value from a valued instance of the same feature present on another lexical item. In example (72), for instance, the gender features of the determiner and adjective would be lexically unvalued; they would be valued via syntactic agreement with the gender feature of the noun, which in turn is listed in the lexicon as feminine, that is, it is already valued. As Pesetsky and Torrego point out, the interpretable–uninterpretable distinction is concerned with a different phenomenon, namely whether a feature of a particular lexical item makes a contribution to semantic interpretation. The person and number features on the DP in example (72), for instance, contribute to semantic interpretation, but the corresponding features on the verb seem to make no contribution to meaning, since this has already been achieved by the DP. Pesetsky and Torrego suggest eliminating the bi-conditional relationship that currently exists for many syntacticians between (un)interpretable and (un)valued features, since, they claim, the lexicon should not couple such distinct properties as interpretability (the message an item sends to the semantics) and valuation (the syntactically relevant properties of a lexical item). As a result, in their analysis lexical items can come from the lexicon with features that display two properties which are not possible in Chomsky (2000, 2001): (i) uninterpretable but valued features; and (ii) interpretable but unvalued features (in addition to the generally accepted uninterpretable unvalued features and interpretable valued features).

In the following analysis, I follow Pesetsky and Torrego in assuming that (un)interpretable and (un)valued features should be treated separately. I also adopt their feature-sharing version of Agree, defined below.

- (73) *Agree (Feature sharing version)* (Pesetsky and Torrego 2004: 4)
- (i) An unvalued feature  $F$  (a *probe*) on a head  $H$  at a syntactic location  $\alpha(F_\alpha)$  scans its c-command domain for another instance of  $F$  (a *goal*) at location  $\beta(F_\beta)$  with which to agree.
  - (ii) Replace  $F_\alpha$  with  $F_\beta$ , so that the same feature is present in both locations.

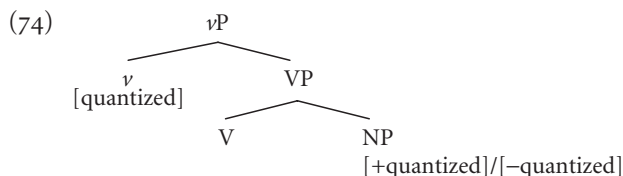
I will suggest that the accusative Case in the Slavic languages under analysis is linked to (the feature sharing version of) Agree between an unvalued aspectual feature in  $\nu$ —a [quantized] feature—and elements within the  $\nu P$  with valued aspectual features ([+quantized] or [−quantized] features), that is, it is not linked to the valuing of an uninterpretable feature. My analysis does not rule out the possibility therefore that  $\nu$  has an interpretable but unvalued aspectual



feature. That is,  $v$  can behave like T, which, according to Pesetsky and Torrego, has an interpretable but unvalued tense feature. Pesetsky and Torrego maintain that V carries the valued tense feature and T therefore values its tense feature with the tense feature on V. The only features relevant in the following analysis are unvalued features, not uninterpretable ones.

#### 4.2 *Creation/consumption verbs*

Consider first how Case and aspect are valued with imperfective creation/consumption verbs. As discussed in section 3.1, the presence versus absence of an internal argument and the status of that internal argument as quantized or non-quantized plays a role in the event structure of imperfective creation/consumption verbs in the Slavic languages. The following configuration illustrates the basic structure I assume for these verbs when they are merged with an internal argument in the Slavic languages:



Notice that in this configuration  $v$  has an unvalued [quantized] feature, whereas the NP has a valued [+quantized] or [−quantized] feature (depending on whether it is quantized or not). In this configuration the probe  $v$  searches its c-command domain and values its unvalued quantized feature with the closest element containing a valued [+quantized] or [−quantized] feature, that is, the NP. A [+quantized] NP results in a [+quantized] verb phrase (i.e. a telic verb phrase), whereas a [−quantized] NP results in a [−quantized] verb phrase (an atelic verb phrase). In the spirit of Chomsky (2000, 2001), I assume that the accusative Case is valued as a sort of ‘side effect’ of this valuing operation: in essence it is the morphological manifestation or spell-out of ‘aspectual Agree’ within the verb phrase.<sup>43</sup>

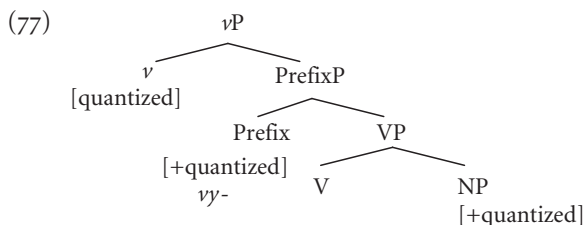
<sup>43</sup> The hypothesis that the event structure of a verb phrase is compositionally determined in the syntax is not new. Verkuyl (1993), for instance, posits that semantic aspectual information is distributed over constituents in the sentential structure. That is, the aspectual values of a clause are dependent both on the quantificational properties of constituents such as NPs/DPs and on the abstract semantic information contained in a verb of the type [± ADD TO], a feature which indicates whether the verb is ‘dynamic’ (denotes change) or not. My analysis differs from Verkuyl’s in the way in which verbs have been classified in the Slavic languages. Also, the theoretical syntactic apparatus differs significantly from Verkuyl, and other analyses that link Case and aspect in the syntax (e.g. Borer 2005a; Kratzer 2004; Pereltsvaig 2000, 2001; and Travis 1992, 1994, 2000, among many others).

As a sidenote, a number of DPs that appear to be non-quantized in English can be added to a creation/consumption verb, yet the verb phrase still passes telicity tests. These DPs include, for example, 'a quantity of milk' in 'Mary drank a quantity of milk in an hour'. The argument 'a quantity of milk' appears to be non-quantized, since a part of 'a quantity of milk' can also be described as 'a quantity of milk' and the sum of, say, two glasses of milk can be described as 'a quantity of milk.' Zucchi and White (2001) analyse the role of apparent problematic non-quantized internal arguments like these in the telicity of the verb phrase and suggest that they receive a quantized interpretation through 'maximalization' effects. They also suggest that all DPs with explicit determiners are quantized because the meanings of these DPs determine sets of maximal participants (see their work for discussion). This notion of 'maximalization' is included in the [+quantized] syntactic feature I adopt, that is, DPs like 'a quantity of milk' would be specified as [+quantized] in the syntax. I also assume that the [+quantized] feature on an internal argument in the syntax covers notions like 'totality' (corresponding to 'all' or 'whole' in Filip 2000a). A noun like *čaj* 'tea' in Russian, for instance, can be interpreted as quantized or non-quantized, depending on whether it occurs with an imperfective or perfective creation/consumption verb, for example:

- (75) Ivan            pil                    čaj.  
       Ivan-NOM drank-IMPF tea-ACC  
       'Ivan was drinking tea.'/'Ivan drank tea.'
- (76) Ivan            vy-pil                    čaj.  
       Ivan-NOM drank-PF tea-ACC  
       'Ivan drank (up) (all) the tea (i.e. in totality).'

In example (75), the internal argument *čaj* 'tea' is interpreted as non-quantized, whereas in example (76) it refers to a 'totality' ('all the tea' or 'the whole tea') and is therefore quantized, as discussed in Filip 2000a. Thus, an internal argument like *čaj* 'tea' could merge in a derivation with a [+quantized] or [–quantized] feature. It merges with a [+quantized] feature, for instance, when it has a 'totality' interpretation.

The event structure of creation/consumption verbs can also be affected by a lexical prefix, e.g. the prefix *vy-* in example (76) above creates a telic verb phrase. The prefix *vy-* in this example constitutes a lexical prefix, since, like many lexical prefixes, it has affected the event structure of the verb phrase, and it has a derived secondary imperfective counterpart *vy-pivat*'. The basic structure I assume for lexically prefixed verbs like *vy-pit* 'to drink up' in Russian is illustrated under (77):



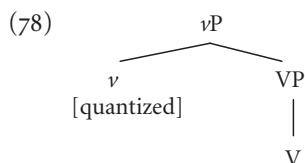
As discussed in Filip 2000b (and elsewhere), the internal argument no longer determines the (a)telicity of the verb phrase with perfective creation/consumption verbs, but rather the lexical prefix plays the crucial role in the event structure of the verb phrase, namely it creates a telic verb phrase. I assume that in this configuration  $\nu$  now values its [quantized] feature with the valued [+quantized] feature associated with the lexical prefix (and that only lexical prefixes carry aspectual features, since only these play a role in event structure alternations). That is, valuing of the [quantized] feature in  $\nu$  is subject to locality, namely  $\nu$  values its unvalued feature with the closest element in its c-command domain specified with a valued [ $\pm$ quantized] feature. In the structure under (77), the lexical prefix is the closest element with a valued aspectual feature; thus, it provides  $\nu$  with a [+quantized] value.<sup>44</sup>

The question that may arise is why the accusative Case occurs on the NP when there is no longer a direct Agree relationship between the internal argument and  $\nu$ . Much current work in syntactic theory assumes a direct probe–goal relationship is necessary for the accusative Case to occur (i.e. it is thought that the accusative Case is the morphological spell-out of Agree between a phi-complete  $\nu$ —a  $\nu$  with a complete set of object phi-features—and the internal argument). I assume, however, that a direct relationship between the  $\nu$  probe and the internal argument is not necessary for the accusative Case to arise. In general, I assume that structural Case is linked to the featural composition of certain functional categories (see Bailyn 2004; Brown 1999; and Richardson 2003a, for similar proposals). The accusative Case, for instance, is directly linked to the status of  $\nu$ P as [quantized] in the syntax. It is valued as a type of ‘side effect’ of aspectual Agree, which takes

<sup>44</sup> See Ludwig (1995) for evidence that in situations of multiple prefixation a higher prefix does not generally affect the argument structure of a base verb if a lower prefix has already done so. Thus, we would not expect a superlexical prefix to merge with an additional argument which in turn could affect the event structure of the base verb if the lexical prefix has already affected the argument structure of the verb. The case-assigning properties of a superlexical prefix could, of course, still override accusative Case valuing via ‘aspectual Agree’, since the superlexical prefix would be closer to an internal argument in a derivation than  $\nu$  as the structure under (12) in section 2 illustrates.

place within the minimal domain (the c-command domain) of  $v$ .<sup>45</sup> Such a hypothesis has the advantage of capturing syntactically the pattern that the accusative Case is clearly aspectually relevant in the Slavic languages, in that it is linked to whether the event structure of a base verb is compositional.

Consider now what happens when no internal argument is merged in the derivation with imperfective creation/consumption verbs, that is, when we have a configuration along the lines of (78).



I assume that creation/consumption verbs do not merge with any valued feature in V (unlike other verbs, as will become clear shortly). This hypothesis is motivated by the fact that the event structure of these verbs is so dependent on the presence versus absence of an internal argument and the status of that argument as quantized or non-quantized. That is, in a sense, these base verbs are 'non-aspectual'. When no other element is merged in the syntax with these verbs, the unvalued quantized feature on  $v$  receives a default atelic setting in the syntax, that is, in the absence of any feature-valuing operation in the syntax, atelicity arises as the default setting. Such a hypothesis is motivated by the pattern that atelicity is the unmarked or default form of a verb, and that the majority of telic verb phrases are derived, as stated by Borer (2005a), Krifka (1992), and others.

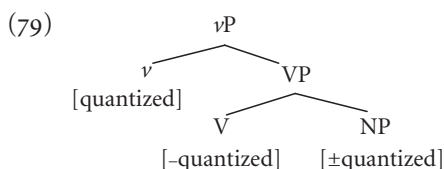
Notice that one of the important aspects of the hypothesis presented here is that the presence of an internal argument is not obligatory whenever a [quantized]  $\nu P$  is merged in a derivation, otherwise an accusative argument would always obligatorily merge with creation/consumption verbs, contrary to fact. Aspectual Agree can occur, regardless of whether or not an (accusative) argument is merged in a derivation. The crucial pattern here is that if a bare internal argument is merged within the  $\nu P$  (i.e. the argument is not dominated by any additional structure such as a PP, QP, or ApplCP) and that  $\nu P$  is [quantized], the argument will occur in the accusative Case as the morphological spell-out of aspectual Agree within the  $\nu P$ , provided a closer prefix does not have a C/case feature it needs to assign or value. If a closer prefix assigns/values C/case on the argument, aspectual Agree will still occur, but no accusative Case marking is

<sup>45</sup> There does, however, appear to be a direct relationship between T and the nominative Case on an external argument, i.e. the nominative Case is the morphological manifestation of the feature valuing relationship that occurs between T (with its unvalued phi-features) and the external argument (with its valued phi-features).

necessary (as the morphological manifestation of Agree), since the internal argument will already have a C/case feature.

#### 4.3 *Non-creation/consumption verbs and the accusative Case*

As already mentioned (see p. 67), many verbs in the Slavic languages remain atelic, irrespective of the presence versus absence of an internal argument or the status of that internal argument as quantized or non-quantized, yet these verbs also merge with an accusative Case marked-argument, for example verbs like *stir*, *love*, *know*, and *push*. As illustrated in section 3.2, however, verbs like these can combine with a lexical prefix which can affect their event structure. I assume that when these verbs merge with a lexical prefix, Agree operates in exactly the same manner described above for creation/consumption verbs (as illustrated in the configuration under (77) above), that is, the lexical prefix values the [quantized] feature in  $\nu$ . In the absence of a lexical prefix, however, we would have the following configuration (a bare telic verb would have a similar structure, except the feature specified in V would be [+quantized] instead of [−quantized]):



I assume that, unlike creation/consumption verbs, which are so dependent on an internal argument for their event structure (including its very presence or absence), verbs like *stir*, *love*, *know*, and *push* have a valued [−quantized] feature in V, that is, their base verb is specified in the lexicon as [−quantized]. In the absence of a lexical prefix merged above the VP level, the closest valued aspectual feature which  $\nu$  can probe is the feature in the V itself. I assume therefore that  $\nu$  values its unvalued aspectual feature with V and, as expected, the accusative Case arises with these verbs as the morphological spell-out of Agree within a [quantized]  $\nu$ P.<sup>46</sup>

It may turn out that some accusative Case-assigning base verbs exist in the Slavic languages whose atelic or telic status remains the same, irrespective of the elements with which they merge in the syntax. There are two possible reasons for why these verbs might still merge with an accusative Case-marked argument and not a lexical one. First, these verbs may still be specified as

<sup>46</sup> It is perhaps important to note that I assume so-called directional/determinate base verbs of motion in the Slavic languages are inherently [+quantized] (e.g. Russian *idti* 'to walk'), whereas non-directional/indeterminate base verbs of motion are inherently [−quantized] (e.g. Russian *xodit'* 'to walk').

[quantized] in the syntax, a feature which provides the verbs with the potential for their event structure to be compositional. This feature would enable them, for instance, to merge with a terminative prefix, at least in the spoken language. In BCS, for instance, the atelic verbs *zloupotrebljavati* (*zloupotrebljivati*)/*zloupotrebiti* (*zloupotrijebiti*) ‘to misuse, abuse, take advantage of’ assign the accusative Case, not a lexical one, yet no telicizing prefixes are listed in the Serbian/Croatian reverse dictionary (Matesić 1965) for these verbs. According to my native informants, however, colloquially the verb *zloupotrebiti* can merge with the prefix *iz-* creating the telic verb phrase *iz-zloupotrebiti* ‘to finish abusing’ (e.g. *On je iz-zloupotrebio sve žive beneficije za 10 dana* ‘He used and abused all living benefits/perks in 10 days’). Thus, these base verbs would still merge with a [quantized] feature in the syntax, despite the absence of the telicizing prefix *iz-* with these verbs in the prescriptive norm. Alternatively, the accusative Case could also constitute the default case assigned to a nominal within the extended verb phrase when *v* is in some way defective, that is, in the absence of a [quantized] feature or any lexical specification of case. A similar hypothesis can be found in Pereltsvaig 2001 and Richardson 2003a. Pereltsvaig, for instance, claims that the accusative arises in Russian as the default case on those internal arguments that do not check their accusative Case in an (inner) AspP. For Pereltsvaig, this default accusative case is assigned to all arguments that are not so-called ‘situation delimiters’ and that do not merge with what she terms BOUNDED verbs (see her analysis for a definition of boundedness). For Pereltsvaig this means that the default accusative would also arise on the internal arguments of verbs like *stir*, *push*, *love*, and *know*, for example. Pereltsvaig’s hypothesis essentially predicts that most accusative case marking would constitute default cases, given the large number of arguments that are not ‘situation delimiters’ (and that do not occur with bounded verbs).<sup>47</sup> In the analysis presented in this chapter, very few accusative arguments (if any in some languages) would occur in a default accusative case, since the event structure of the vast majority of base verbs in the Slavic languages is compositional and the accusative Case is linked to this pattern. The hypothesis that the accusative might constitute a default case on internal arguments also finds support in Franks 1995. Franks suggests that the accusative is a default case, at least in Russian. He maintains that it is the ‘least marked case’, that is, it is

<sup>47</sup> Pereltsvaig also links lexical case marking to the inability for a lexical case-marked argument to function as a situation delimiter or to occur with bounded verbs. For Pereltsvaig (2001), however, only instrumental case-marked arguments appear to constitute true lexical case-marked arguments. Thus, like Babko-Malaya (1999), she focuses on a distinction between accusative versus instrumental case-assigning verbs. As discussed in chapter 2, I assume that verbs in the Slavic languages can assign lexical genitive, dative, and instrumental cases.

'the case assigned by a verb (or preposition) in the absence of feature specifications' (Franks 1995: 53). I therefore leave open the possibility that the accusative case might also be available in the Slavic languages as a last resort to save a derivation, in other words, a default case.

As is well known, there is a construction in which the accusative Case does not obligatorily occur on an internal argument in all the Slavic languages, despite the presence of a [quantized] base verb in a derivation, namely unaccusative constructions. In the following section I show that these constructions do not pose a problem for the analysis presented in this chapter.

## 5. Unaccusatives

Unaccusative verbs select an internal argument, but no external argument. That is, the argument selected by an unaccusative verb behaves syntactically like an internal argument rather than an external one. Notice that in the examples under (80) and (81) in Russian, for instance, the argument of the verb *pri-jti* 'to arrive' can occur in the genitive of negation (GN), which, in turn, is an operation claimed to target internal arguments only. The argument with the verb *tancevat* 'to dance' in examples (82) and (83), on the contrary, cannot occur in the GN because it is merged with an unergative verb, that is, with a verb that selects an external argument, but no internal argument. The ungrammaticality of the GN in example (83) with the unergative verb *tancevat* 'to dance' shows that the GN cannot target external arguments, whereas the grammaticality of the GN in example (81) suggests that the argument *otvet* 'the/an answer' constitutes an internal argument with the verb *pri-jti* 'to arrive', that is, *pri-jti* constitutes an unaccusative verb.<sup>48</sup>

- (80) *Otvét prišel* (unaccusative)  
 answer-NOM arrived-[+AGR]  
 'The/a answer arrived.'
- (81) *Otvéta ne prišlo.* (GN)  
 answer-GEN NEG came-[-AGR]  
 'No answer came.'  
 (Babby 1980b: 71)

<sup>48</sup> The tests for 'objecthood' in unaccusatives differ across the various Slavic languages. The GN can be used as a test in the ESL languages. In Polish, however, the GN cannot be used as a diagnostic, but other tests exist such as the ability to form a resultative adjective in *-ly*, and the so-called distributive *po* test. The distributive *po* test can also be used as a diagnostic for unaccusativity in Russian and Czech. For discussion of unaccusativity diagnostics in general in the Slavic languages see Harves (2002b, 2006, forthcoming, and references therein), and for Polish, see Cetnarowska (2000, 2002).

- (82) Devuška tancevala. (unergative)  
 girl-NOM danced-[+AGR]  
 'A/The girl danced.'
- (83) \*Devuški ne tancevalo. (GN)  
 girl-GEN NEG danced-[-AGR]

We might expect the internal argument of a verb like *pri-jti* to occur with accusative Case marking in Russian unaccusative constructions, since the event structure of its base verb *idti* 'to go' is [quantized], that is, this base verb can merge with a variety of different prefixes which affect its event structure, including the prefix *pri-* which creates the telic verb phrase *pri-jti* 'to arrive'. The argument in example (80) above, however, is in the nominative Case.<sup>49</sup> This pattern is found across the Slavic languages, that is, in unaccusatives nominative Case marking is either possible (the East Slavic languages) or obligatory (the West and South Slavic languages).

There is, however, a type of unaccusative construction in the East Slavic languages in which the accusative Case does arise on the internal argument, namely in so-called ADVERSITY IMPERSONAL (Babby 1994b) or ACCUSATIVE UNACCUSATIVE (Lavine and Freiden 2002) constructions, e.g.:

- (84) Saldata paranila kuljaj. (Belarusian)  
 soldier-ACC wounded-[-AGR] bullet-INSTR  
 'A soldier was wounded by a bullet.'
- (85) Ego pereexalo avtomobilem. (Russian)  
 him-ACC ran-over-[-AGR] automobile-INSTR  
 'A car ran him over/[He was run over by a car].'  
 (Babby 1994b: 28–9)
- (86) Ja spodivajusja, ščo cej žart ne bude (Ukrainian)  
 I-NOM hope that this joke-ACC NEG will  
 vykorystano 'Pravdoju Ukrajinu.'  
 used-[-AGR] Pravda-INSTR Ukraine-GEN  
 'I hope that this joke won't be used by "Ukrainian Pravda".'  
 (Wieczorek 1994: 47)

In these examples, the internal arguments occur in the accusative Case, but there is no agreement morphology on the verb—the verb has impersonal

<sup>49</sup> A construction like *Kniga prišla* 'The/a book arrived' makes it clear that the argument in (80) is in the nominative C/case, since feminine nouns ending in *-a* in Russian take the ending *-u* in the accusative Case, whereas masculine nouns like *otvet* do not change morphologically in the accusative. That is, if *otvet* were in the accusative Case in (80) we would expect to find \**Knigu prišla* 'The book-ACC arrived-3.SG.FEM' as a parallel to *Otvét prišel*, but this pattern is never found.



neuter singular morphology (represented by the feature [–AGR] in the parsing). The unaccusative verb in example (80) above, on the contrary, agrees in number and person with the argument *otvet* ‘the/an answer’. The problem we face is why the nominative Case occurs on the internal argument with [quantized] unaccusative verbs in the Slavic languages, when we might expect the accusative, and why some unaccusative verbs do merge with accusative internal arguments, namely in the East Slavic languages.

I follow a number of scholars in assuming that, unlike transitive or unergative verbs in the Slavic languages, unaccusatives lack a *vP* shell (Brown 1999; and Schoorlemmer 2004, among others). I also assume that in the absence of a *vP* shell, the unvalued quantized feature that would otherwise reside in *v* is transferred to T. This means that T has two sets of unvalued features linked to Case: its unvalued phi-features (linked to the nominative Case) and its unvalued aspectual features (linked to the accusative Case). Thus, we have a situation in which two sets of unvalued features are competing for Agree. In the West and South Slavic languages under analysis, the phi-features in T always take precedence for Agree, which results in nominative Case marking on the argument (and no accusative unaccusative constructions). In these languages the unvalued aspectual feature residing in T could still be valued against a lexical prefix, internal argument, PP, or the verb (V) itself, but no accusative Case marking is necessary (as the morphological manifestation of Agree), since the internal argument already has a Case feature—a nominative one. In the East Slavic languages, however, we witness a situation in which the phi- and aspectual features in T compete for precedence: if the phi-features in T take precedence, the result is nominative Case marking on the argument and agreement morphology on the verb; if the aspectual feature in T takes precedence, the accusative Case arises on the argument and there is no agreement morphology on the verb. That is, when aspectual Agree takes precedence in the East Slavic languages, T no longer values its phi-features with the argument, hence the default morphology on the verb.<sup>50</sup> As with the other Slavic languages, if the phi-features in T take precedence for Agree, aspectual Agree can still occur, but no accusative Case marking will arise, since the argument already has a Case feature.

It is important to note that it is not the case that either phi- or aspectual features can be manifested (via Case) in any unaccusative construction in the East Slavic languages, otherwise we would have unaccusative constructions in

<sup>50</sup> Unlike the relationship between accusative internal arguments and *v*, there is always a direct relationship between T and a nominative Case-marked argument. In effect, valuing the accusative Case on an argument renders that argument ‘invisible’ to T, hence the absence of phi-agreement.

which the accusative Case arises with a verb like *prijti* 'to arrive', for example Russian \**Otvet-ACC/Knigu-ACC prišlo*-[−AGR] 'The/An answer/The/A book arrived', contrary to fact. The crucial factor motivating the precedence of aspectual Agree in the East Slavic languages appears to be whether or not an unaccusative construction involves a PROTO-AGENT, which has been demoted to an explicit or implicit by-phrase (as discussed here). I use the term proto-agent based on Dowty's (1991) work on proto-roles. Dowty posits that SUBJECTS constitute proto-agents and OBJECTS proto-patients. He suggests that we can determine the subject versus object status of an argument by determining which proto-role properties apply best to it. Examples (87) and (88) below list the contributing properties of proto-agents and proto-patients, respectively.

(87) *Proto-agent characteristics:*

- a. volitional involvement in the event[uality] or state;
- b. sentience (and/or perception);
- c. causing an event or change of state in another participant;
- d. movement (relative to the position of another participant);
- e. exists independently of the event[uality] named by the verb.

(88) *Proto-patient characteristics:*

- a. undergoes a change of state;
- b. incremental theme;
- c. causally affected by another participant;
- d. stationary relative to movement of another participant;
- e. does not exist independently of the event[uality], or not at all.

Accusative unaccusatives in the ESL languages differ from their nominative counterparts in one important respect: only accusative unaccusatives have a proto-agent in their transitive counterpart which can be 'demoted' to a proto-agent by-phrase in the unaccusative construction (this proto-agent by-phrase is represented by an NP with instrumental Case marking).<sup>51</sup> Notice, for

<sup>51</sup> This is only possible with semantically inanimate proto-agents like *avtomobil* 'automobile' in Russian and *kulja* 'bullet' in Belarusian. No semantically animate 'by-phrase' is possible in the accusative unaccusative constructions under (84) and (85) above. This animacy restriction does not hold in Ukrainian, as example (ii) below illustrates:

- i. Ljudmyla            znajšla            u    košyku    nemovlja.  
Ljudmyla-NOM   found-[+AGR]   in   basket   baby-ACC  
'Ljudmyla found a/the baby in a basket.'
- ii. Nemovlja    bulo    znajdeno            u    košyku    Ljudmyloju.  
baby-ACC    was    found-[−AGR]   in   basket   Ljudmyla-INSTR  
'A baby was found in a basket by Ljudmyla.'

(This example is based on an example cited in Lavine and Freiden 2002: 259)

instance, that in the following Russian examples, the nominative DP *motocikl* ‘motorcycle’ can function as the agent of the verb *pereexat* ‘to run over’ (example 89), and it can be demoted to an agent by-phrase with the same verb, creating an accusative unaccusative (example 90).

- (89) Motocikl            ego            pereexal.  
       motorcycle-NOM   him-ACC   ran-over-[+AGR]  
       ‘A motorcycle ran him over.’
- (90) Ego            pereexalo            motociklom.  
       him-ACC   ran-over-[-AGR]   motorcycle-INST  
       ‘He was run over by a motorcycle.’

Notice further, however, that no agent or proto-agent by-phrase can occur with the unaccusative verb *priйти* ‘to arrive’, as examples (91) and (92) illustrate.

- (91) \*Motocikl            (/Telegraf)            prišel            otvet.  
       Motorcycle-NOM   (/Telegraf-NOM)   arrived-[+AGR]   answer-ACC
- (92) ??Otvét            prišel            motociklom.  
       answer-NOM   arrived-[+AGR]   motorcycle-INST  
       ‘(Intended interpretation) An answer arrived by motorcycle.’

The nominative Case-marked argument in (89) and the argument in the instrumental Case-marked by-phrase in example (90) constitute proto-agents, since they cause an event[uality] or change of state in another participant and they involve movement (relative to the position of another participant). The argument *ego* ‘him’ in these two examples, on the contrary, constitutes a proto-patient, since it is causally affected by another participant. This other participant can be explicit or implicit, that is, the instrumental by-phrase is not obligatory in example (90).<sup>52</sup> I assume that the existence

<sup>52</sup> This hypothesis also holds for ABSOLUTE IMPERSONALS like (i) below.

- i. Sestru            korčilo            (ot    boli).            (Russian)  
    sister-ACC   writhed-[-AGR]   (from   pain-GEN)  
    ‘The sister writhed in pain.’

Impersonal verbs like *korčit* ‘to writhe’, *rvat* ‘to vomit’, and *tošnit* ‘to feel nauseated’ take accusative internal arguments and impersonal agreement morphology on the verb. I assume that these verbs have an (implicit or explicit) CAUSER (a type of proto-agent), manifested as a PP. In example (i) this proto-agent is the pain (*bol*) that caused the sister to writhe. Similarly, in an example like (ii), ‘food’ constitutes a type of proto-agent which causes the speaker to feel nauseated.

- ii. (Ot    edy)    Menja    tošnilo.            (Russian)  
      from   food   me-ACC   nauseated-[-AGR]  
      ‘The food made me feel nauseated.’

for Agree.<sup>53</sup>

marking alternations.

from Russian illustrate.

- 'An/The answer arrived.'

As is clear from the English translations of these examples, the internal argument of accusative unaccusatives can be indefinite, which, according to Harves' analysis, would predict they lack a [person] feature, and thus should not be able to enter into Agree with *v*. That is, the accusative Case should not arise in examples like (i), contrary to fact. The NP in nominative unaccusative constructions can also be definite (example ii), and therefore we would expect accusative Case marking on the argument, contrary to fact. As discussed elsewhere in this chapter, object phi-features again do not appear to provide any real insight into the Case-marking patterns in (most of) the Slavic languages.

## 6. Conclusion

My main goal in this chapter was to account syntactically for the observation that the accusative Case is ‘aspectually relevant’ in the Slavic languages. Throughout this chapter I have demonstrated that linking the accusative Case to the compositional event structure of a base verb enables us to connect this structural Case to a phenomenon for which there is evidence in the grammar of these languages, unlike hypotheses that link the accusative Case to the object phi-features of a verb in the Slavic languages. The claim that (the accusative) Case and aspect are intimately connected is not a new one. As mentioned at the beginning of this chapter, a number of scholars have linked Case and aspect in a variety of different languages, including Russian (Babko-Malaya 1999; Borer 2005a; Pereltsvaig 2000, 2001; and Richardson 2003a, 2003b). In general, however, these scholars have focused on the link between telicity and accusative Case marking in Russian (Borer 2005a; Richardson 2003a, 2003b; and, to a certain extent Babko-Malaya 1999), or boundedness and the accusative Case, including the role of an argument as a ‘situation delimiter’ (Pereltsvaig 2000, 2001). Such hypotheses predict that a vast number of accusative Case-marked nominals are not linked to any aspectual phenomena, since many accusative arguments occur with atelic (and unbounded) verb phrases and many arguments do not function as situation delimiters. The advantage of the hypothesis presented in this chapter is that most (if not all) accusative Case marking on internal arguments can be linked to event structure patterns across the Slavic languages. A further generalization that emerges from an analysis that links Case and aspect more broadly in the Slavic languages is that there is a pattern underlying the accusative versus lexical genitive, dative, and instrumental *C*/case-marking contrast, contrary to popular belief. Namely, while lexical case is unpredictable in terms of the semantics of a given verb, it is predictable in the sense that it occurs with (two-place) atelic base verbs whose event structure is never compositional.

# Case and Grammatical Aspect in East Slavic Depictives

## 1. Introduction

The preceding chapter focused on the link between Case and semantic aspect. In this chapter I show that some Case-marking patterns in the Slavic languages are also linked to grammatical aspect.<sup>1</sup> In particular I will demonstrate that the instrumental versus Case agreement dichotomy in so-called depictive secondary predicate constructions in the East Slavic languages (ESL) is directly linked to grammatical aspect. This Case-marking opposition in depictives is illustrated in examples (1)–(3) below.

- (1) Janka            pryjšoŭ    dadomu    z            špitalja                            (Belarusian)  
      Janka-NOM arrived    home        from    hospital  
      zdarovy/            zdarovym.  
      healthy-NOM/    healthy-INTR  
      ‘Janka arrived home from the hospital healthy(/cured-INTR).’
- (2) Ivan            prišel        domoj    iz            bol’nicy                            (Russian)  
      Ivan-NOM arrived    home        from    hospital  
      zdorovyj/            zdorovym.  
      healthy-NOM/    healthy-INTR  
      ‘Ivan arrived home from the hospital healthy(/cured-INTR).’

<sup>1</sup> The findings in this chapter and the next build upon insights in Richardson 2001a, 2001b, 2003a, 2003b, 2006. The judgements of the Russian examples are based on research conducted in Russia (where I interviewed over thirty native speakers), the US (five speakers) and the UK (thirteen speakers). The Belarusian examples are based on judgements by seven native speakers, all of whom live in Belarus. The Ukrainian examples are based on the judgements of twelve native speakers who reside in Ukraine, the UK, and Canada.

- (3) Borys pryjšov dodomu z likarni (Ukrainian)  
 Boris-NOM arrived home from hospital  
 zdorovyj/ zdarovym.  
 healthy-NOM/ healthy-INSTR  
 'Boris arrived home from the hospital healthy(/cured-INSTR).'

Depictive secondary predicates name a state in which one of the arguments of the verb occurs during the eventuality described by the verb (depictives are defined in more detail in section 2 below). The examples in (1)–(3) show that in the East Slavic languages a depictive adjective can either occur with the same nominative Case marking as its antecedent (Case agreement) or it can occur with instrumental Case marking (agreeing then only in gender and number features with its antecedent). In this chapter I will illustrate that if the state denoted by the adjective is interpreted as bounded in time, the instrumental Case arises on the adjective, whereas if it is interpreted as unbounded, Case agreement occurs. This pattern finds a direct parallel in the aspectual system of verbal predicates in the East Slavic languages: bounded predicates occur in the perfective aspect, unbounded ones in the imperfective (as discussed in chapter 2, section 2.2).

There is a wealth of literature on depictive secondary predicates in Russian (see, for instance, Babby 1999; Bailyn and Rubin 1991; Bailyn 1995a, 2001; Filip 2001; Franks 1995; Nichols 1981; Richardson 2001b, 2003a, 2003b; and Timberlake 1986, among many others). The syntax and semantics of depictives in Belarusian and Ukrainian, however, have been largely ignored.<sup>2</sup> This chapter will therefore provide the first detailed comparative account of the syntax and semantics of depictive constructions in the East Slavic languages. It will show that all three languages encode the same grammatical aspectual contrast in their depictive constructions, although the syntax of depictives differs slightly across the three languages.

The findings in this chapter support the claim in Dickey 2000, 2005 that the Slavic languages can be divided into western (Czech, Slovak, Slovene) and eastern (Russian, Ukrainian, Belarusian, Bulgarian) groups, with Polish and BCS occupying a transitional zone between these two groups. As discussed in chapter 2, section 2.3, Dickey's claim is based on the observation that the distribution and semantics of grammatical aspect differs across the two groups of Slavic languages. Of those Slavic languages with rich morphological

<sup>2</sup> Mrázek (1964) provides a brief preliminary descriptive account of the so-called predicate instrumental in the ESL languages. To my knowledge, Richardson (2006) is the only work that provides a detailed account of the syntax and semantics of depictives in Ukrainian. No detailed work appears to exist on the syntax and semantics of depictives in Belarusian.

C/case systems, only the languages in the eastern group all have an instrumental–Case agreement dichotomy in their secondary predicate constructions, which in turn is consistently linked to grammatical aspectual contrasts.<sup>3</sup> Dickey’s ‘transitional Polish’ exhibits some hints of a Case marking contrast in depictives, in that the instrumental Case does not appear to be absolutely unacceptable to many native speakers in examples like (4) below.<sup>4</sup>

- (4) Wyszedłem bogaty/      ???bogatym,      wróciłem biedny/  
 left                      rich-NOM/      ???rich-INSTR      returned      poor-NOM/  
 ???biednym.  
 ???poor-INSTR  
 ‘I left rich and returned poor.’  
 (Przepiórkowski 1999: 203)

Native speakers, however, claimed that the use of the instrumental Case in examples like these was very unnatural. Furthermore, there does not seem to be any connection between a Case opposition and aspect in Polish depictives. Thus, unsurprisingly, the aspectual contrasts encoded in depictives have not reached Polish, given its transitional status in Dickey’s system. In the western group of Slavic languages no Case opposition exists in depictives: Case agreement is obligatory (and this also holds for ‘transitional Bosnian/Croatian/Serbian’).

As is well known for Russian, both the Case-marking opposition and secondary predication in general are not restricted by semantic interpretation alone; they are also sensitive to a number of syntactic constraints. Example (5) below, for instance, illustrates that the instrumental Case is ungrammatical on the secondary predicate when its antecedent is contained within a PP, a pattern noticed by Bailyn and Rubin (1991).<sup>5</sup> Examples (6) and (7) show that an instrumental Case-marked adjective is possible with some accusative antecedents (example 6), but not all (example 7), a pattern noticed by

<sup>3</sup> It is important to note, however, that in general the formation of depictives in Belarusian is more restricted than in Russian and Ukrainian. For example, while a depictive construction like ‘he ate the meat raw’ is possible in Russian and Ukrainian, most of my Belarusian native informants claimed they could only say ‘he ate the raw meat’. In the following analysis I therefore only present depictives in Belarusian that were accepted by the overwhelming majority of native speakers interviewed. I assume, for the time being, that the limited existence of depictive secondary predicates in general in Belarusian is probably the result of influence from Russian (and/or Ukrainian), since some speakers claimed that some of the depictive constructions I tested sounded more like Russian than Belarusian.

<sup>4</sup> See Przepiórkowski (1999: 202–3), and references therein, for further examples of instrumental Case marking on predicative adjectives in Polish.

<sup>5</sup> I have not included an adjective with Case agreement in all of these constructions, since in examples (5), (7), (8), and (9) an adjective with case agreement (and a non-nominative case-marked antecedent) has an appositive or NP modifier interpretation. I discuss this pattern shortly.



Richardson (2001b, 2003a, 2003b). In fact, a depictive secondary predicate in general can only refer to an external argument antecedent in both examples (5) and (7).<sup>6</sup> Examples (8)–(10) demonstrate that only certain dative case-marked arguments can serve as an antecedent for a secondary predicate.

- (5) Ivan<sub>i</sub> posmotrel na Boris<sub>a<sub>k</sub></sub> golym<sub>i/\*<sub>k</sub></sub>. (\*antecedent in PP)  
 Ivan-NOM looked at Boris naked-INST  
 ‘Ivan looked at Boris naked’ (only Ivan can be naked).
- (6) Druz’ja priveli ego domoj (ACC antecedent)  
 friends-NOM brought him-ACC home  
 p’jany<sub>m<sub>i</sub></sub> (/p’janog<sub>i</sub>).  
 drunk-INST (/drunk-ACC)  
 ‘Friends brought him home drunk’ (‘he’ is drunk).
- (7) Ivan<sub>i</sub> tolknul Boris<sub>a<sub>k</sub></sub> p’jany<sub>m<sub>i</sub>/\*<sub>k</sub></sub>. (\*ACC antecedent)  
 Ivan-NOM pushed Boris-ACC drunk-INST  
 ‘Ivan pushed Boris drunk’ (only Ivan can be drunk).
- (8) Ja<sub>i</sub> dal emu<sub>k</sub> den’gi p’jany<sub>m<sub>i</sub>/\*<sub>k</sub></sub>. (\*DAT antecedent)  
 I-NOM gave him-DAT money drunk-INST  
 ‘I gave him money drunk’ (only I can be drunk).
- (9) \*Mne<sub>i</sub> vse nadoedaet trezvym<sub>i</sub>. (\*DAT antecedent)  
 I-DAT everything bores sober-INST  
 (intended interpretation) ‘Everything bores me (when I’m) sober.’
- (10) Mne<sub>i</sub> ne rabotaetsja p’jany<sub>m<sub>i</sub></sub> (/p’janomu<sub>i</sub>). (DAT antecedent)  
 I-DAT NEG work-[-AGR] drunk-INST (/drunk-DAT)  
 ‘I can’t seem to work drunk.’

These same basic contrasts also hold in Belarusian and Ukrainian (although Belarusian does not appear to allow depictive secondary predicates in general with dative antecedents). Examples like these suggest that depictive secondary predication is sensitive to the syntactic structure of a given construction. They also suggest that the morphological C/case of an antecedent is not determining whether secondary predication is possible or not (contra Bailyn

<sup>6</sup> Some have treated secondary predicates with external argument antecedents as different structures, i.e. so-called CIRCUMSTANTIALS. I do not differentiate between depictives predicated of an external versus internal argument, since the distribution of depictive secondary predicates with external arguments is sensitive to the same sorts of constraints characteristic of depictives in general, as will become clear shortly. Furthermore, in the East Slavic languages a depictive with an external argument antecedent encodes the same aspectual contrasts as one with an internal argument antecedent. For discussion of so-called circumstantials, see Mallén (1992) and references therein.

1995a), since some accusative and some dative arguments can serve as an antecedent for a depictive, whereas others cannot. In this chapter, I address both the semantics of the Case-marking opposition in depictives in the East Slavic languages and also the syntax of depictive secondary predication in general. In the following section, I provide a detailed definition of depictive secondary predication before I turn to an analysis of the grammatical aspectual contrast encoded by depictives in the East Slavic languages (section 3), the syntax of depictives (section 4), and the syntax of the instrumental–Case agreement dichotomy (section 5).

## 2. What is a depictive?

As mentioned at the beginning of this chapter, depictive secondary predicates describe a state in which one of the arguments of the verb occurs during the eventuality denoted by the verb. They are said to be like adjectives in that they attribute a property to an individual selected by the verb, but like adverbs in that they also attribute a property to the eventuality described by the verb. Himmelmann and Schultze-Berndt (2004: 77–8) suggest, based on extensive cross-linguistic research, that the following seven criteria characterize depictive secondary predication in general:

(11) *Criteria for depictive secondary predication:*

- a. A construction contains two separate predicative elements, the main predicate and the depictive, and the state of affairs expressed by the depictive holds within the time-frame of the eventuality expressed by the main predicate.
- b. The depictive is obligatorily controlled, i.e. there exists a formal relation to one participant of the main predicate, the controller, which is usually interpreted as a predicative relationship (i.e. the depictive predicates an eventuality of the controller). The controller is not expressed separately as an argument of the depictive.
- c. The depictive makes a predication about the controller which is at least in part independent of the predication conveyed by the main predicate, i.e. the depictive does not form a complex or periphrastic predicate with the main predicate.
- d. The depictive is not an argument of the main predicate, i.e. it is not obligatory.
- e. The depictive does not form a low-level constituent with the controller, i.e. it does not function as a modifier of the controller.

- f. The depictive is non-finite (i.e. not marked for tense or mood categories), or the dependency of the depictive on the main predicate is indicated in other formal ways.
- g. The depictive is part of the same prosodic unit as the main predicate.

The first criterion noted above has been discussed in some detail in Geuder 2002. Geuder illustrates that depictives do not have any independent temporal meaning, that is, they are always anchored to the eventuality denoted by the primary predicate. He illustrates that the primary and secondary predicate overlap temporally, with the state referred to by the depictive holding true at the same time as the eventuality described by the primary predicate (although the state may also have held before and/or after the eventuality denoted by the primary predicate). Notice, for instance, that the depictive adjective 'sad' in the following example in English entails a temporal coincidence between the state described by the adjective and the eventuality denoted by the primary predicate:

- (12) John left the party sad.  
(Geuder 2002: 183)

Consider now the different interpretations of examples (13) and (14).

- (13) When we had eaten, we were tired.  
(14) ?We had eaten tired.

As Geuder (2002) notes, the time of the clause 'we were tired' in example (13) can overlap with the time of the perfect in the 'when'-clause ('when we had eaten'), although the clause 'we were tired' refers to a time after the eventuality denoted by the predicate in the perfect. This type of reading is never available for depictive constructions like example (14). That is, example (14) cannot be interpreted along the lines of 'we were tired at the time in question, which is after the eating eventuality'. Geuder (2002: 185) states that the only possible way to make sense of (14) is to interpret it as 'we were tired during the eating eventuality'. This pattern supports the criterion listed under (11a) above, that is, the depictive does not have independent temporal meaning, but instead is anchored to the eventuality described by the primary predicate.

There have been numerous works on the fourth criterion above (point d). These have typically focused on the differences between depictives and so-called SMALL CLAUSE constructions. In small clause constructions, unlike depictives, the predicate is an argument of the main verb. Depictive secondary predicates, on the contrary, are thought to be adjuncts. Compare the different

behaviour of the adjectival predicates in the following constructions, for instance (these examples are taken from Russian, but the same basic patterns also occur in Belarusian and Ukrainian):

- (15) Ivan        vernulsja domoj zdorovyj/        zdorovym.  
 Ivan-NOM returned home healthy-NOM/ healthy-INTR  
 'Ivan returned home healthy.'
- (16) Ivan vernulsja domoj.  
 Ivan returned home.
- (17) Ja        sčitaju Ivana umnym/        \*umnogo.  
 I-NOM consider Ivan-ACC intelligent-INTR/ \*intelligent-ACC  
 'I consider Ivan intelligent.'
- (18) \*Ja        sčitaju Ivana.  
 I-NOM consider Ivan-ACC

Examples (15) and (16) illustrate that the depictive AP (adjectival phrase) can be eliminated without any change in grammaticality, that is, it is not an obligatory argument of the verb, hence the claim that depictives are adjuncts. Examples (17) and (18), on the contrary, show that in small clause constructions, the predicate adjective with a verb like *sčitat'* 'to consider' is obligatory, that is, it is merged as part of the complement structure of the verb phrase. These examples also illustrate another difference between depictive and small clause constructions, namely both Case agreement and instrumental Case marking are possible on the adjective in the depictive construction, whereas the instrumental Case is obligatory in the small clause construction. As will become clear throughout this chapter, one of the hallmarks of depictive secondary predication in the East Slavic languages is the possibility for either Case agreement or instrumental Case marking to occur on a secondary predicate. That this pattern does not occur with a verb like *sčitat'* also suggests that we are dealing with two different structures.

Some have suggested that depictives actually constitute a type of small clause construction in the sense that, like small clauses, they involve a subject–predicate relation. Scholars have tried to capture this subject–predicate relation with structures like the following (Aarts 1992; Hoekstra 1988; Hornstein and Lightfoot 1987; and Stowell 1981, 1983, among others):<sup>7</sup>

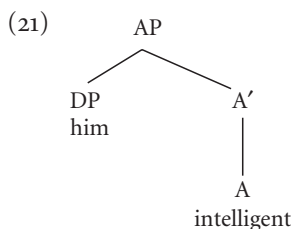
- (19) I ate the meat [PRO raw]<sub>SMALL CLAUSE</sub>

<sup>7</sup> I use the term SUBJECT to refer to the specifier position of a maximal projection. The term EXTERNAL ARGUMENT, on the contrary, refers specifically to the spec, vP position.

The element PRO in this construction is said to function as the subject of the predicate ‘raw’ in the same way that ‘him’ functions as the subject of the predicate ‘intelligent’ in the following small clause construction in English:

- (20) I consider [him intelligent]<sub>SMALL CLAUSE</sub>

Stowell (1981, 1983) originally posited the following configuration to account for the subject-predicate relationship between ‘him’ and ‘intelligent’ in a construction like (20):



For Stowell, the spec, AP position in this configuration constitutes a kind of subject position (similar to the external argument position of an extended verb phrase). This structure is also meant to capture syntactically the pattern that a mental attitude verb like ‘consider’ selects a proposition as its complement (the AP).<sup>8</sup> In the structure under (19) above there is a control relationship between the antecedent ‘the meat’ and the subject of the small clause PRO. As Koizumi (1994b) notes, however, control analyses that posit a small clause structure in depictives face the challenge that indirect objects are possible controllers of PRO in English, yet an indirect object cannot serve as an antecedent for a depictive adjective.<sup>9</sup> Consider the following examples in English, for instance (examples taken from Pykkänen 2002: 27):

<sup>8</sup> There is an alternative hypothesis in the literature for the structure of constructions like ‘I consider him intelligent’ which is often referred to as PREDICATION THEORY. Proponents of predication theory state that an argument can be the subject of a predicate without being its true syntactic subject in the structural sense (primarily Williams 1980, 1983a, but also Carrier Duncan and Randall 1992; Culicover and Wilkins 1984; Roberts 1988; Rothstein 1983, 1992; and Schein 1995, among others). Within predication theory a construction like ‘I consider him intelligent’ would be represented by a structure like (i) below.

i. I [consider [him]<sub>DP</sub> [intelligent]<sub>AP</sub>] <sub>VP</sub>

In this configuration, the subject of the predicate adjective is located outside the adjective’s maximal projection. The exact structure of constructions like ‘I consider him intelligent’ is not crucial in this chapter. What is crucial is that depictives differ from small clauses syntactically, i.e. they are adjuncts, not complements of the verb.

<sup>9</sup> See Pykkänen (2002: 37) for evidence that examples like the following do not constitute true exceptions to this generalization in English:

- (22) *Control construction (the indirect object is a possible controller of PRO):*  
I wrote him<sub>i</sub> a letter to PRO<sub>i</sub> show his mother.
- (23) *Depictive construction (the indirect object is not a possible controller of PRO):*  
\*I told him<sub>i</sub> the news drunk<sub>i</sub>.

Notice that the internal argument in example (22) can control PRO, whereas the indirect object in example (23) cannot serve as an antecedent for the secondary predicate 'drunk', which suggests that it does not in turn control a PRO antecedent, that is, the following configuration is incorrect:

- (24) \*I told him<sub>i</sub> the news PRO<sub>i</sub> drunk<sub>i</sub>.

This pattern also holds in the East Slavic languages, that is, a dative (indirect object) can serve as an antecedent in a control construction, but it cannot antecede a depictive adjective, as the following examples from Russian illustrate (example 25 is possible in the spoken language):<sup>10</sup>

- (25) *Control construction (the indirect object is a possible controller of PRO):*  
Ja dala emu<sub>i</sub> den'gi PRO<sub>i</sub> tancevat' na večerinku.  
I gave him-DAT money PRO to-dance at party  
'I gave him money to dance at the party.'
- (26) *Depictive construction (the indirect object is not a possible controller of PRO):*  
\*Ja dala emu<sub>i</sub> den'gi p'janym<sub>i</sub>.  
I gave him-DAT money drunk-INST

These examples suggest that the control relationship is not a correct generalization for the structure of depictive secondary predicates. Thus, depictives differ crucially from small clause constructions. That is, the depictive is not an argument of the main predicate (point (11d) above), the controller is not expressed separately as an argument of the depictive, that is, as PRO (11b), and the depictive is an adjunct, that is, it does not form a complex periphrastic predicate with the main predicate (11c).

The fifth criterion under (11) above (point e) is an important one: the claim that a depictive does not function as a modifier of the controller. The ESL languages have scrambling; thus, an adjective with C/case agreement could

- i. Victorian doctors preferred to give their female patients<sub>i</sub> a physical exam fully-dressed<sub>i</sub>.
- ii. The nurse gave the patient<sub>i</sub> his medication still groggy<sub>i</sub>/half-asleep<sub>i</sub> (examples taken from Maling 2001).

<sup>10</sup> Case agreement is possible on the AP in a construction like (25), but the adjective then has an NP modifier/attribute or appositive interpretation, not a depictive interpretation. I return to this distinction shortly.

potentially constitute an attributive or modifying adjective that occurs to the right of an NP due to scrambling. As mentioned at the beginning of this chapter, in the East Slavic languages some verbs cannot merge with a depictive adjective that refers to the verb's internal argument, even if that internal argument has accusative Case marking. With these verbs Case agreement is obligatory on the adjective, and that adjective has an NP modifier/attribute or appositive interpretation. In the NP modifier/attribute interpretation of an adjective, the most natural word order is for the adjective to precede the NP, not to follow it, that is, the adjective occurs to the right of the NP due to scrambling. In the appositive interpretation of the adjective a pause is necessary and, in standard written Russian, a comma is required, that is, the adjective is not part of the same prosodic unit as the verb; thus, it does not constitute a depictive (according to point 11g above). Appositives are free adjuncts (Stump 1985) that can left- or right-adjoin to any level in a clause, including the verb phrase, an NP, PP, and so on. This means that appositives are often grammatical in constructions in which a pure depictive secondary predicate is not. Notice, for instance, that examples (27) and (28) are ungrammatical in English (if the adjective refers to the internal argument). They are, however, markedly improved in examples (29) and (30) if there is an intonation break and or heavy stress on the focused item.

- (27) \*Betty pushed John<sub>i</sub> drunk<sub>i</sub>.  
 (28) \*I gave the money to John<sub>i</sub> drunk<sub>i</sub>.  
 (29) Betty pushed John<sub>i</sub>, ... **drúnk**<sub>i</sub>.  
 (30) Betty gave John<sub>i</sub> the money, ... **drúnk**<sub>i</sub>.

Consider now the Russian construction in example (31) (contrasted with the similar example (7) at the beginning of this chapter). Notice that Case agreement is obligatory on the adjective in this example. The word order in this example is unnatural: the more natural word order is for the adjective to precede the NP. The adjective in this example either has an appositive or NP modifier/attribute interpretation (that is, in the non-appositive reading, the adjective occurs to the right because scrambling has occurred).

- (31) Ivan            tolknul    Boris<sub>i</sub>        p'janogo<sub>i</sub>/        \*p'janym<sub>i</sub>.  
       Ivan-NOM pushed Boris-ACC drunk-ACC/        \*drunk-INSTR  
       'Ivan pushed Boris (and Boris was) drunk.'  
 a. Appositive interpretation of the adjective.  
 b. NP modifier/attribute interpretation of the adjective.

Consider further example (6) at the beginning of this chapter, repeated below as (32).

- (32) Druz'ja      priveli      ego      domoj      p'janym<sub>i</sub>      (/p'janogo<sub>i</sub>).  
 friends-NOM brought him-ACC home drunk-INSTR (/drunk-ACC)  
 'Friends brought him home drunk.'
- Appositive interpretation (Case agreement).
  - NP modifier/attribute interpretation (Case agreement).
  - Depictive interpretation (instrumental Case or Case agreement).

In this example the verb can merge with a depictive adjective that refers to the verb's (accusative) internal argument. This depictive adjective can occur either in the instrumental Case or it can agree in Case with its antecedent. In effect, the adjective with Case agreement in this example has an ambiguous interpretation: it can be interpreted as an appositive; an NP modifier or attribute; or a depictive (in which case it is 'equivalent' to an instrumental Case-marked adjective).<sup>11</sup> We can determine whether the adjective with Case agreement in a construction like this (and example 31) has an appositive interpretation by ascertaining whether it is part of the same prosodic unit of the main predicate, that is, whether a pause (or comma) is required (appositive interpretation). In the NP modifier/attribute interpretation of the adjective, no pause (or comma) is required. This interpretation is perhaps more obvious when the NP constitutes a personal name (e.g. if we replace *ego* 'him' with the NP *Ivana* 'Ivan' in example 32 above) since the East Slavic languages have a PF (Phonological Form) constraint whereby an attributive/modifying adjective must occur to the right of a pronoun, whereas this restriction does not exist with other nominals. Once we replace the pronoun with a personal name the most natural word order on the NP attribute/modifier interpretation is AP-NP. We can test whether an adjective constitutes an NP modifier/attribute with both pronouns and nouns with the (colloquial) pseudo-cleft diagnostic. The following examples illustrate, for instance, that the *wh*-phrase *kogo* 'who' can be coindexed with the entire string [*Ivana pjanogo*] in examples like (31) and (32):

- (33) Kogo<sub>i</sub>      ja      tolknula— (tak èto)      [Ivana      p'janogo]<sub>i</sub>.  
 who-ACC I pushed (so this) Ivan-ACC drunk-ACC  
 'Who I pushed was Ivan (who was) drunk (/drunk Ivan).
- (34) Kogo<sub>i</sub>      druz'ja      priveli      domoj— (tak èto)      [Ivana  
 who-ACC friends brought home (so this) Ivan-ACC  
 p'janogo]<sub>i</sub>  
 drunk-ACC  
 'Who his friends brought home was Ivan (who was) drunk (/drunk Ivan).

<sup>11</sup> I am grateful to Natasha Franklin for discussing this example in depth with me.



These examples illustrate that the adjective with Case agreement forms a constituent with its antecedent (*Ivana* 'Ivan').<sup>12</sup> As mentioned above, the adjective with Case agreement in an example like (32) also has a depictive interpretation. Unlike example (31), the word order NP–AP is considered perfectly natural in example (32). This observation alone suggests that the two structures can differ syntactically. We can also test for this difference using the pseudo-cleft diagnostic. The crucial distinction between an NP modifier/attribute interpretation of an adjective and a depictive interpretation is that in depictives the antecedent and the adjective do not form a constituent, that is that a construction like (35) below is ungrammatical.

- (35) \*Kogo<sub>i</sub>        druž'ja    priveli    domoj— (tak   èto)  
               who-ACC friends brought home        (so    this)  
       [ *Ivana*        p'janym]<sub>i</sub>.  
       Ivan-ACC    drunk-INTRSTR  
       (Intended interpretation) 'Who his friends brought home was Ivan  
       (who was) drunk (/drunk Ivan).

Furthermore, a depictive adjective never immediately precedes the NP. Thus, in determining whether an adjective with Case agreement can have both an NP modifier/attribute and depictive interpretation it is necessary to ascertain whether coreference with *kogo* 'who' in the pseudo-cleft construction is obligatory or not. For those speakers who accept depictives with Case agreement,<sup>13</sup> the pronoun *kogo* 'who' in a construction like (34) above does not obligatorily refer to the entire string [*Ivana p'janogo*]. That is, the adjective *p'janogo* can have a depictive interpretation, just like the instrumental Case-marked adjective in example (35). This differs from a construction like (33) above, in which *kogo* only refers to the entire string [*Ivana p'janogo*] (although this pseudo-cleft construction also sounds awkward in Russian with the adjective following the noun). From these patterns we can therefore posit that predicate adjectives with instrumental Case marking never function as 'a modifier of the controller' in depictives (point 11e above), and some adjectives with Case agreement only function as NP modifiers or appositives, whereas others are ambiguous: they can be appositives, NP modifiers/attributes, or depictives. Crucially, these patterns demonstrate that depictive secondary predicates exhibit both instrumental Case marking and Case agreement in the East Slavic languages, that is, not all secondary predicates with Case

<sup>12</sup> The pseudo-cleft diagnostic can also be used to test for an appositive interpretation for some speakers.

<sup>13</sup> A small number of native speakers do not have depictives with Case agreement in general.

agreement constitute appositives or NP modifiers/attributes (contra Bailyn and Rubin 1991; Bailyn 1995a; and Pereltsvaig 2001).

The seven criteria listed under (11) above are not the only characteristics that restrict the distribution of depictive secondary predicates.<sup>14</sup> Numerous scholars have noticed that adjectives in depictive constructions typically denote a transitory or temporally restricted state: to use Carlson's (1977) terminology, they are Stage-level (S-level) predicates. Predicates that denote more permanent characteristics (i.e. Individual-level predicates), are generally infelicitous in depictives. The following examples illustrate this restriction in Russian:

- (36) Ivan            prišel    p'janyj/            p'janym.  
       Ivan-NOM arrived drunk-NOM/ drunk-INTR  
       'Ivan arrived drunk.'
- (37) \*Ivan            prišel    umnyj/            umnym.  
       Ivan-NOM arrived intelligent-NOM/ intelligent-INTR

Example (36) shows that S-level predicates are grammatical in depictives, hence the grammaticality of *p'janyj/p'janym* in this example, whereas example (37) illustrates that Individual-level (I-level) predicates are not, hence the ungrammaticality of *umnyj/umnym* in this example. This semantic restriction on depictives is logical, given the generalization described above that the eventuality denoted by the depictive holds within the time-frame of the eventuality described by a primary predicate. That is, I-level predicates denote characteristics that are not typically temporally restricted, but rather generally hold.

As a sidenote, the I-versus S-level interpretation in depictives is sensitive to pragmatic factors. McNally (1994) illustrates, for instance, that the grammaticality of a secondary predicate in a depictive construction depends on contextual factors, that is, if an I-level predicate can be interpreted as S-level in an appropriate context, then it is grammatical in a depictive construction. A construction like \*'Bill is playing the saxophone talented', for instance, is ungrammatical in English, since 'talented' is an I-level predicate. Some native speakers (including myself), however, accept a construction like (38) below in which 'talented' is interpreted as a change of state.

<sup>14</sup> The only point in the criteria under (11) that I have not addressed is point (f): the depictive is non-finite. This restriction obviously holds for adjectival (and nominal) depictives in the East Slavic languages, since adjectives and nouns do not have tense morphology. In chapter 5, section 2.2, however, I illustrate that Russian has predicative participles in depictive constructions, and these do exhibit tense morphology.

- (38) Bill has been playing the saxophone for years on Pacific Avenue. His secret wish has always been to play the saxophone like John Coltrane, but as everyone knows, he's got no talent whatsoever. Yet miracles do happen: the ghost of John Coltrane appeared before him last night and for a small price offered to endow him with that famous inspiration and skill. *And today, Bill is playing the saxophone talented.*  
(McNally 1994: 572)

This example suggests that the grammaticality of a secondary predicate in a depictive construction also depends on pragmatic and discourse factors, that is, if an I-level predicate can be interpreted as more temporary or transitional (i.e. more like an S-level predicate) in a particular context, it will be acceptable in a depictive construction for many speakers.

The temporary nature of depictives makes them marginal with stative verbs. That is, a conflict arises between the temporary state associated with a depictive and the ongoing state expressed by many statives. In effect, if a predicate adjective is possible with a stative predicate, the resulting construction is a small clause, not a depictive. Consider, for instance, example (39) below, discussed in Rapoport 1999.

- (39) Jones prefers her coffee black.  
(Rapoport 1999: 654)

The entailments for a construction like this versus a true depictive construction are different. In this example Jones does not prefer her coffee, but rather what she prefers is for her coffee to be black. A depictive construction like example (40) below, on the contrary, entails that Mary drank her coffee.<sup>15</sup>

- (40) Mary drank her coffee black.

The East Slavic languages exhibit this same pattern. A construction like (41) below in Russian, for instance, does not entail that the speaker/subject ('I') hates Ivan, but rather that s/he hates Ivan when Ivan is drunk. That is, the string [*Ivana p'jany**m*] 'Ivan drunk' functions as a unit semantically.

- (41) Ja            nenavižu    Ivana<sub>i</sub>        p'jany<sub>i</sub>*m*.  
I-NOM   hate            Ivan-ACC   drunk-INSTR  
'I hate Ivan drunk' (Ivan is the drunk one).

A depictive secondary predicate and its antecedent do not function as a unit semantically. A construction like (42), for instance, entails that the friends

<sup>15</sup> See Rothstein (2003) for syntactic diagnostics which illustrate that these two constructions differ in English.

brought Ivan home, that is, *Ivana* 'Ivan' and *p'janym* 'drunk' do not function as a unit semantically.

- (42) Druz'ja        priveli    Ivana<sub>i</sub>        domoj    p'janym<sub>i</sub>.  
 friends-NOM brought Ivan-ACC home drunk-INSTR  
 'Friends brought Ivan home drunk' (Ivan is drunk).

The adjective and its antecedent in an example like (41) not only function as a unit semantically, they also function as a unit syntactically. Examples (43) and (44) below, for instance, illustrate that the string [*Ivana p'janym*] in example (41) can be substituted with *eto* 'that', and it can be coindexed with *cto* 'what' (for many speakers) in the pseudo-cleft construction *cto X tak eto Y*. That is, these tests demonstrate that [*Ivana p'janym*] 'Ivan drunk' functions as a unit syntactically in example (41). These patterns do not hold for the depictive construction, as examples (45) and (46) show, that is, the pronoun *ego* 'him' in example (45) and *kogo* in example (35) above, repeated below as (46), cannot refer to the string [*Ivana p'janym*].

- (43) Ja        nenavižu    [*Ivana    p'janym*]<sub>i</sub>,    i    Katja    [èto]<sub>i</sub>  
 I-NOM hate        Ivan-ACC drunk-INSTR and Katja this  
 tože    nenavidit.  
 also    hates.  
 'I hate Ivan drunk and Katia hates this too.'

- (44) (?) Čto<sub>i</sub>        ja        nenavižu— (tak èto) [*Ivana*  
 what-ACC I-NOM hate        (so this) Ivan-ACC  
 p'janym]<sub>i</sub>.  
 drunk-INSTR  
 'What I hate is Ivan drunk.'

- (45) \*Včera        Katja        privela    Ivana<sub>i</sub>        domoj    p'janym<sub>i</sub>,  
 yesterday Katja-NOM brought Ivan-ACC home drunk-INSTR  
 a        segodnja    Nataša    privela    ego<sub>i</sub>        domoj.  
 but        today        Natasha brought him home  
 (46) \*Kogo<sub>i</sub>        druž'ja    priveli    domoj— (tak èto) [*Ivana*  
 who-ACC friends brought home (so this) Ivan-ACC  
 p'janym]<sub>i</sub>.  
 drunk-INSTR

The semantic entailment facts combined with these syntactic patterns strongly suggest that the entire string [*Ivana p'janym*] functions as a small clause with stative verbs like *nenavidet* 'to hate', that is, the adjective does not constitute a

depictive secondary predicate. Furthermore, as expected, there is no Case agreement–instrumental Case marking opposition on the predicative adjective with these stative verbs: instrumental case marking is obligatory (an adjective with Case agreement has an appositive or NP modifier/attribute interpretation). That is, the case-marking pattern in these constructions mirrors that of other small clauses merged with verbs like Russian *ščitat'* 'to consider', as discussed on page 113 above.

Rapoport (1993b, 1999) makes the strong claim that in English depictive secondary predicates cannot occur with states or activities; they are only grammatical with achievements and accomplishments. She supports this claim with examples like the following:

- (47) \*Cassandra hit the wall broken.
  - (48) \*The chef pursued the turkey contaminated.
  - (49) Ben cut the bread hot.
  - (50) Nadar cooked the vegetables fresh.
- (Rapoport 1993b: 165, 177)

Others have noted, however, that depictive secondary predicates are possible with some activities. Koizumi (1994b), for instance, illustrates that in English a depictive is possible with the activity verb 'praise', provided a 'semantic mis-match' between the primary and secondary predicate does not occur. The following examples illustrate this point:

- (51) ?/\*Mary praised the professor<sub>i</sub> drunk<sub>i</sub>.
  - (52) The photographer praised the model<sub>i</sub> naked<sub>i</sub>.
- (Koizumi 1994b: 64)

Notice further that while example (48) above is ungrammatical, most native speakers find example (53) with this same verb acceptable.

- (53) John chased/pursued Mary drunk (he thought he'd have a better chance of catching her if she was drunk).

I therefore assume that in principle depictive secondary predication is possible with activities, provided a 'semantic mis-match' between the primary and secondary predicate does not occur. (I return to the ungrammaticality of examples like 47 above in section 4.)

Thus, depictive secondary predication is sensitive to a wide variety of constraints in the East Slavic languages and in language in general. In the following section I address the Case agreement versus instrumental Case-marking dichotomy in these constructions in the East Slavic languages. I only

consider those secondary predicates with Case agreement that could be interpreted as depictives by native speakers (in addition to appositives or NP modifiers/attributes).

### 3. Grammatical aspect and the instrumental–Case agreement dichotomy

A number of scholars have noticed that depictives can occur with a distinct C/case or adposition in a variety of different languages, such as Japanese (Takezawa 1993), Georgian (Boeder 2005), Laz (Kutsscher and Genç 2005), Finnish (Pylkkänen 2002), and Swiss-German (Bucheli Berger 2005), among others. As discussed in Himmelfmann and Schultze-Berndt 2004, C/case agreement in depictives is also widespread: it exists in Classical Greek and Latin, Modern Greek, the Romance languages, and many Australian languages.<sup>16</sup> What makes the East Slavic languages particularly interesting typologically is that both Case agreement and a distinct Case (the instrumental) are possible in depictives. This section will illustrate that this instrumental–Case agreement dichotomy is directly linked to a grammatical aspectual contrast, that is, it is linked to whether the eventuality denoted by the secondary predicate is bounded or unbounded in time.<sup>17</sup>

Consider first the interpretation of the two adjectives with different Case marking in examples (1)–(3) at the beginning of this chapter, repeated below as (54)–(56).

- (54) Janka            pryjšoŭ    dadomu    z            špitalja            (Belarusian)  
 Janka-NOM arrived home from hospital  
 zdarovy/            zdarovym.  
 healthy-NOM/ healthy-INSTR  
 ‘Janka arrived home from the hospital healthy(/cured-INSTR).’
- (55) Ivan            prišel    domoj    iz            bol’nicy            (Russian)  
 Ivan-NOM arrived home from hospital  
 zdorovyj/            zdorovym.  
 healthy-NOM/ healthy-INSTR  
 ‘Ivan arrived home from the hospital healthy(/cured-INSTR).’

<sup>16</sup> See Himmelfmann and Schultze-Berndt (2004: 87–93) for a discussion of different types of morphological marking on depictives in a wide variety of languages.

<sup>17</sup> I do not consider so-called SECOND DATIVE constructions in this chapter, i.e. the SEMI-PREDICATES *odin* ‘alone’ and *sam* ‘alone/oneself’ that occur with dative case marking in Russian, for instance. The case-marking opposition on these elements is not linked to an aspectual contrast. Furthermore, these constructions exhibit different syntactic constraints from the adjectival depictives discussed in this chapter. Babby (1998a) claims that these semi-predicates constitute floating quantifiers. If he is correct, then they are a type of NP attribute/modifier, not a depictive secondary predicate.

- (56) Borys pryjšov dodomu z likarni (Ukrainian)  
 Boris-NOM arrived home from hospital  
 zdorovyj/ zdarovym.  
 healthy-NOM/ healthy-INSTR  
 'Boris arrived home from the hospital healthy(/cured-INSTR).'

In all three languages, the adjective with instrumental Case marking in these examples can imply that the antecedent came home cured as a result of being in the hospital, that is, it implies a change of state. The adjective with Case agreement, on the contrary, does not imply that any change of state occurred, but rather it simply describes the subject's state—he was healthy in general.<sup>18</sup> This change of state interpretation of (some) predicate adjectives with instrumental Case marking has been noticed by numerous scholars (e.g. Filip 2001; Nichols 1981; Richardson 2003a, 2003b, 2006; and Timberlake 1986, among many others), although it is not the sole interpretation of an adjective with instrumental Case marking, as Nichols (1981), Timberlake (1986), and Richardson (2003a) note. Some of the varying interpretations of the two adjectives with different Case marking in examples (54)–(56) are listed below under (57) and (58).

- (57) *Instrumental Case marking on the adjective:*
- The healthy state is a change of state: he went to the hospital unwell and returned healthy (cured).
  - The healthy state is perceived as complete.
  - The subject came home from the hospital healthy, but he is not necessarily healthy at the time of this utterance, i.e. the healthy state holds true at a particular point in time.
- (58) *Case agreement on the adjective:*
- No change of state implied: the adjective simply describes his state.
  - No interpretation that the antecedent's healthy state is complete, e.g. he might be feeling a little dizzy.
  - The antecedent could still be healthy at the moment of the utterance, i.e. the healthy state does not hold true at a particular point in time only.

As will become clear shortly, these different interpretations of the two adjectives can be subsumed under a grammatical aspectual contrast.

As Chvany (1975: 237) notes, the use of the instrumental Case is particularly prevalent in Russian in folk tales dealing with changes by magic. In the Russian

<sup>18</sup> I am grateful to Asya Pereltsvaig for discussing the interpretation of the Russian example under (55) with me.

example (59) below, for instance, the adjective with Case agreement means that the dog was silver in appearance only, whereas the adjective with instrumental Case marking means that the dog had become silver as a result of its immersion in the water. This same semantic contrast between the two adjectives is also found in Belarusian and Ukrainian (examples 60 and 61, respectively), e.g.:

- (59) Sobaka vyšla iz vody serebrjanaja/ (Russian)  
 dog-NOM came-out from water silver-NOM/  
 serebrjanoj.  
 silver-INSTR  
 'The dog came out of the water silver.'  
 (Chvany 1975: 237)
- (60) Sabaka vyjšaŭ z vady srebrany/ (Belarusian)  
 dog-NOM came-out from water silver-NOM/  
 srebranym.  
 silver-INSTR  
 'The dog came out of the water silver.'
- (61) Sobaka vyjšov z vody sribnyj/ (Ukrainian)  
 dog-NOM came-out from water silver-NOM/  
 sribnym.  
 silver-INSTR  
 'The dog came out of the water silver.'

These examples provide further support for the link between instrumental Case marking and a change of state interpretation.

Consider now the following examples in Russian and Ukrainian:<sup>19</sup>

- (62) Ira s"jela poslednij kusoček jabloka (Russian)  
 Ira-NOM ate last piece apple  
 p'janaja/ p'janoj.  
 drunk-NOM/ drunk-INSTR  
 'Ira ate the last piece of apple drunk.'
- (63) Ira zjila ostannij kusoček jabluka (Ukrainian)  
 Ira-NOM ate last piece apple  
 pjana/ pjanoju.  
 drunk-NOM/ drunk-INSTR  
 'Ira ate the last piece of apple drunk.'

<sup>19</sup> Not all native speakers accepted a depictive in these constructions due to the artificial nature of the situation described.



For those speakers who accepted both Case agreement and instrumental Case marking on the adjective in these examples, we see a similar range of interpretations of the two adjectives as we saw for examples (54)–(56). These interpretations are summarized under (64) and (65).

(64) *Instrumental Case-marking on the adjective:*

- a. The drunken state is a change of state that occurred during the apple eating eventuality, i.e. Ira started eating the apple sober, but as she was eating she began to swig away on a bottle of vodka and by the time she took the last bite of the apple, she had become drunk.
- b. The drunken state is perceived as a ‘totality’: Ira could not become any drunker.
- c. Ira ate the apple when she was drunk, but she is no longer drunk at the moment of this utterance.

(65) *Case agreement on the adjective:*

- a. No change of state implied. The adjective simply describes Ira’s state.
- b. No ‘totality’ interpretation. Ira could become drunker.
- c. Ira could still be drunk at the moment of this utterance.

In effect, the adjective with instrumental Case marking in depictive constructions, like the perfective aspect in the verbal system of these languages, describes a state that is bounded in time, that is, it conveys a grammatical aspectual contrast. Recall from chapter 2 that grammatical aspect defines the relationship between the Topic Time (the span of time to which the speaker’s claim is confined) and the Situation Time (the actual time of the eventuality) (Klein 1994). Perfective verbs describe an eventuality that is contained within the Topic Time, whereas imperfective verbs do not. Both perfective verbs and instrumental Case-marked predicates describe eventualities that are bounded in time. An instrumental Case-marked adjective in a depictive secondary predicate construction refers to a state that holds during the Topic Time and makes no reference as to whether that state held before or after this time.<sup>20</sup> In the real world the state might still hold, but this is not encoded by an adjective in the instrumental Case. That is, the adjective with instrumental

<sup>20</sup> It has been noted elsewhere in the literature that a predicative adjective with instrumental Case marking refers to a state that holds at a particular point in time, whereas an adjective with Case agreement does not imply any specific time reference. Shevelov, for instance, in his analysis of Ukrainian claims that the instrumental Case ‘denote[s] a peculiarity, ascribed in time’ (1963: 179). Richardson (2003a, 2006), however, is, to my knowledge, the first to make the strong claim that depictive secondary predicates in Russian and Ukrainian convey a grammatical aspectual contrast and that all the different interpretations of depictives discussed previously in the literature can be subsumed under this grammatical aspectual contrast, including the generalization that an instrumental Case-marked adjective refers to a state that holds at a particular point in time.

Case marking specifically focuses on the fact that the state held during the Topic Time, in other words, it is bounded in time. The state described by an adjective with Case agreement, on the contrary, does not refer to a state that holds at a particular point in time only—the Topic Time—but rather it implies that the state extends beyond the Topic Time. That is, the interpretation of depictive adjectival predicates in the East Slavic languages finds a parallel in the grammatical aspectual system of verbal predicates in the Slavic languages. The diagrams presented in chapter 2 for perfective and imperfective verbs also capture the differences between depictives with instrumental Case marking versus Case agreement, as shown in examples (66) and (67) below. (Recall that in these diagrams the line  $---$  represents time, the boldfaced brackets  $[ ]$  the Topic Time, and the smaller non-boldfaced brackets  $[ ]$ , the Situation Time.)

(66)  $----- [ \text{--} [ \text{--} ] \text{--} ]$  TOPIC TIME  $-----$



Eventuality occurs within the Topic Time  
(perfective aspect, instrumental Case)

(67)  $----- [ \text{-----} ]$  TOPIC TIME  $-----$



Eventuality holds throughout and potentially extends beyond  
the Topic Time (imperfective aspect, Case agreement)

The diagram in (66) illustrates the *TOTALITY* reading of a bounded eventuality, typical of verbs in the perfective aspect, and a possible interpretation of the instrumental Case-marked adjective in examples (54)–(56), (62) and (63) (i.e. the healthy state is perceived as complete in examples 54–56, and the drunken state is perceived as a ‘totality’ in examples 62 and 63). This diagram also captures the intuition that an instrumental Case-marked adjective describes a state that held at a particular point in time (without making any reference as to whether it still held beyond that time), and/or a change of state. That is, if a state only holds for a subinterval of the Topic Time, then there are also subintervals during which it did not hold, hence the possible interpretation of some instrumental Case-marked predicates that a change of state has occurred.<sup>21</sup> Furthermore, recall that, according to Dickey

<sup>21</sup> See Ionin and Matushansky 2002 for a similar claim for instrumental Case-marked predicates in Russian copular constructions. I address their analysis of the Case marking opposition in copular constructions in chapter 5, section 3.2.

(2000, 2005), perfective verbs in the East Slavic languages signal that an eventuality is viewed as a totality and as qualitatively different from prior and/or subsequent states of affairs. According to this definition, it is not surprising that instrumental Case-marked predicates can denote a change of state, that is, like perfective verbs, they can describe a state that is qualitatively different from prior and/or subsequent states of affairs. The diagram in (67) captures the interpretations (summarized under (58) and (65) above) of an adjective with Case agreement, that is, no ‘totality interpretation’, no change of state, and the state does not hold at a particular point in time only.

The adjectives discussed thus far (*healthy*, *silver*, and *drunk*) may appear to be particularly good candidates for a bounded interpretation, since they can readily be interpreted as changes of state, for instance. It is well known that adjectives like *last* and *first* can also exhibit an instrumental–case agreement opposition, as example (68) shows for *pervyj* ‘first’ in Russian. These adjectives may seem like less likely candidates for a change of state interpretation.<sup>22</sup>

- (68) Ona            uvidela   ego<sub>i</sub>            pervogo<sub>i</sub>/   pervym<sub>i</sub>.  
       she-NOM    saw-PF   him-ACC   first-ACC/   first-INST  
       ‘She caught sight of him first/in first place.’

The instrumental Case-marked adjective in an example like (68) would be appropriate, for instance, if when the speaker caught sight of the person in question, that person was running with a group of people and he was coming first out of this group, not second, third, or last. It is best rendered in English as ‘in first place.’ The adjective with Case agreement, on the contrary, implies that the speaker caught sight of the person in question before she caught sight of any of the other runners; it does not entail that he was coming first. While the adjective *pervym* ‘first’ in this example might be difficult to interpret as a change of state, it can be interpreted as bounded in time. That is, the adjective with instrumental Case marking implies that the eventuality described by the adjective held at a particular point in time, and it is different from prior and/or subsequent states of affairs. This accounts for the contrastive interpretation this adjective has for many speakers (i.e. the ‘in first place’ interpretation). That is, if the eventuality denoted by the instrumental Case-marked adjective holds at a particular point in time during the Topic Time, this implies there are other periods of time when a different state could hold (e.g. a second, third, or last state). No such contrastive reading occurs with the adjective with Case agreement.

<sup>22</sup> Some speakers find an instrumental Case-marked adjective in this construction unnatural.

The hypothesis that the Case-marking opposition in depictives encodes a grammatical aspectual contrast accounts for the common claim in many traditional grammars that an adjective with instrumental Case marking denotes a more temporary state than one with Case agreement. That is, if an instrumental Case-marked adjective describes an eventuality that is contained within the Topic Time, whereas one with Case agreement does not, the interpretation that the adjective with instrumental Case marking denotes a more temporary state of affairs falls out naturally from this grammatical aspectual contrast.<sup>23</sup>

I assume that the link between instrumental Case marking and boundedness also provides an explanation for why NP depictives occur only occasionally in the East Slavic languages. In the ESL languages only NPs with instrumental Case marking are possible in depictive constructions (although some speakers do not even accept these), as the following example from Russian illustrates:

- (69) On           vernulsja domoj bednjakom/   \*bednjak.  
       he-NOM returned home pauper-INSTR/ \*pauper-NOM  
       ‘He returned home a pauper.’

As discussed in Bailyn 1995a and Richardson 2003a, an NP with Case agreement in a construction like (69) above requires the insertion of an additional element like *kak* ‘as’, termed a case absorber by Bailyn and a conjunction phrase by Richardson. Once the element *kak* is added, however, the NP no longer has a depictive reading, but rather it is interpreted as a manner adverbial: ‘he returned home like a pauper.’<sup>24</sup>

- (70) On           vernulsja domoj kak bednjak.  
       he-NOM returned home like pauper-NOM  
       ‘He returned home like a pauper.’

I assume that, in general, NPs are less felicitous in depictives because NPs are always I-level predicates in the ESL languages (recall that I-level predicates are infelicitous in depictives).<sup>25</sup> In the right context, however, an NP can be interpreted as bounded and therefore more like an S-level predicate (just like other I-level predicates for some speakers of English, cf. McNally 1994).

<sup>23</sup> The link between grammatical aspect and Case-marking patterns also means that depictives will encode many of the pragmatic and discourse patterns encoded by grammatical aspect in the verbal system. See Richardson (2003a: 179–80) for evidence that this is indeed the case.

<sup>24</sup> In Richardson 2003a I mistakenly treated these types of constructions as depictives with Case agreement.

<sup>25</sup> I am grateful to Ora Matushansky for discussing the semantics of NP predicates with me, including their status in depictives.

If an NP can be interpreted as bounded, then instrumental Case marking is obligatory in the East Slavic languages, since only instrumental Case-marked predicates denote that a predicate is bounded in time and therefore, in a sense, more temporary or transitory, that is, more like an S-level predicate. Thus, we only expect instrumental Case-marked NP depictives in the East Slavic languages, given the general restriction on NP depictives in these languages.

As a sidenote, I assume that depictives are ruled out with non-finite predicates because such constructions fail to obey the first criterion listed under (11a) in section 2 of this chapter, namely, that ‘the state of affairs expressed by the depictive holds within the time-frame of the eventuality expressed by the main predicate’. I follow Wurmbrand (2006, 2007) in the claim that non-finite verbs are TENSELESS.<sup>26, 27</sup> This means that infinitives lack a time-frame within which an eventuality denoted by a depictive secondary predicate could hold. Thus, depictive secondary predication is ruled out with non-finite verbs, although secondary predication in general is, of course, possible. In the East Slavic languages, a secondary predicate with non-finite verbs obligatorily occurs with instrumental Case marking, as examples (71)–(74) below illustrate.

- (71) Ja paprasila Ivana<sub>i</sub> ne pryhodzic’ (Belarusian)  
 I-NOM asked Ivan-ACC NEG to-arrive  
 na vječarynu pjanym<sub>i</sub>/ \*pjanaga<sub>i</sub>.  
 at party drunk-INSTR/ \*drunk-ACC  
 ‘I asked Ivan not to come to the party drunk.’
- (72) Ivan prišel na večerinku tancevat’ (Russian)  
 Ivan-NOM arrived at party to-dance  
 golym (/?golyj).  
 naked-INSTR/ (/?naked-NOM)  
 ‘Ivan came to the party to dance naked.’
- (73) Tancuvaty golym/ \*golyj duže (Ukrainian)  
 to-dance naked-INSTR/ \*naked-NOM very  
 soromno.  
 embarrassing  
 ‘It’s very embarrassing to dance naked.’

<sup>26</sup> I use small capitals to refer to semantic TENSE, and lower case to refer to morphological tense.

<sup>27</sup> Wurmbrand notes that this hypothesis appears to be a common assumption in many semantic works on infinitives, e.g. Ogihara 1996, Abusch 1997, and Eneç 2004. In the syntactic literature, however, a common view that has prevailed since Stowell (1982) is that there are two types of infinitival complements—TENSED and TENSELESS ones.

It has been suggested that Case agreement is possible on the secondary predicate in non-finite constructions in Russian, but only if the antecedent for the predicate is an external argument in the higher finite clause (Franks 1995; Richardson 2001a), hence the grammaticality for some speakers of a construction like (72) in Russian with Case agreement on the adjective (*golyj*-NOM). The adjective with Case agreement in this example, however, has an appositive interpretation. That is, it is possible when it is not integrated intonationally into the verb phrase.<sup>28</sup> Furthermore, many speakers did not accept this construction with Case agreement on the adjective, claiming it would be fine only if the infinitive *tancevat* 'to dance' were removed. As mentioned in this discussion (see from p. 113), one of the hallmarks of depictive secondary predication in the East Slavic languages is the possibility of either Case agreement or instrumental Case marking on a secondary predicate (for the majority of speakers). That only instrumental case marking is possible on a secondary predicate with non-finite verbs also makes the status of such predicates as depictives suspicious. I therefore assume that the instrumental case which arises on the adjective in non-finite constructions is the default case assigned to a predicate in the absence of any Case valuing in the East Slavic languages, as posited for Russian in Richardson 2003a. That the instrumental Case would constitute the default case on predicates should not be too surprising, given the wide distribution of the instrumental in these languages: in Jakobsonian (1936, 1958) terms, the instrumental C/case is the most UNMARKED C/case after the nominative.<sup>29</sup>

<sup>28</sup> These patterns also hold for the Case agreement patterns in non-finite constructions discussed in Richardson 2003a (211–13), which were mistakenly identified as depictives.

<sup>29</sup> It is also possible that Case agreement does not occur in non-finite constructions because the antecedent PRO which occurs with the non-finite verb does not have a C/case feature; thus, the instrumental Case is the only possible syntactic option, as Geist (2006) posits for non-finite copular constructions in Russian. See Babby (1998a, and elsewhere), however, for the claim that PRO has a dative C/case feature, at least in Russian. Some syntactic evidence for a difference between secondary predicates in depictives versus non-finite constructions comes from *wh*-movement patterns in Russian. *Wh*-movement of an instrumental Case-marked adjective in depictives is possible in Russian (example i), whereas *wh*-movement of an instrumental case-marked predicate merged with non-finite verbs is marginal (example ii), despite the fact that *wh*-movement in general is possible across a non-finite verb in Russian (example iii):

- |      |                                           |                  |                                                         |                                        |                    |                                                     |
|------|-------------------------------------------|------------------|---------------------------------------------------------|----------------------------------------|--------------------|-----------------------------------------------------|
| i.   | Kakim <sub>i</sub><br>in-what-state-INSTR | Ivan<br>Ivan-NOM | prišel<br>arrived                                       | domoj<br>home                          | iz<br>from         | bol'nicy t <sub>i</sub> ? (depictive)<br>hospital   |
|      |                                           |                  | 'In what state did Ivan arrive home from the hospital?' |                                        |                    |                                                     |
| ii.  | */?Kakim<br>in-what-state-INSTR           | Ivan<br>Ivan-NOM | prišel<br>arrived                                       | na<br>at                               | večerinku<br>party | tancevat' t <sub>i</sub> ? (non-finite)<br>to-dance |
| iii. | Kogo <sub>i</sub><br>who-ACC              | Ivan<br>Ivan     | xočet<br>wants                                          | priglasit' t <sub>i</sub><br>to-invite | na<br>to           | večerinku? (non-finite)<br>party                    |
|      |                                           |                  | 'Who does Ivan want to invite to the party?'            |                                        |                    |                                                     |

If only instrumental Case-marked predicates in depictives describe a bounded eventuality, then we might expect these predicates to be ungrammatical with a primary predicate in the present tense, since, as Smith (1991/1997: 151–2) points out, it is pragmatically infelicitous to refer to an eventuality in the present tense with a viewpoint that includes its initial and final points, that is, the viewpoint must exclude an endpoint. This hypothesis is borne out in Belarusian, as the ungrammaticality of the instrumental Case-marked adjective in example (74) below illustrates.<sup>30</sup>

- (74) My            tancuem        pjanyja/        \*pjanymi.  
we-NOM    dance-PRES    drunk-NOM/    \*drunk-INST  
'We are dancing drunk.'

In Russian and Ukrainian, however, an instrumental Case-marked adjective is possible with a primary predicate in the present tense, as the following examples illustrate:

- (75) My            tancuem            p'janye/            p'janymi.            (Russian)  
we-NOM    dance-PRES    drunk-NOM/    drunk-INSTR  
'We are dancing drunk' (nominative).  
'We dance drunk' (instrumental).

- (76) My tancujemo pjani/ pjanymy. (Ukrainian)  
 we-NOM dance-PRES drunk-NOM/ drunk-INST  
 'We are dancing drunk' (nominative).  
 'We dance drunk' (instrumental).

Merging an adjective with instrumental Case marking in these languages, however, results in a habitual reading of the verb phrase: ‘we dance whenever we are/get drunk’. This habitual interpretation falls out naturally from the interpretation of the adjective with instrumental Case marking as a change of state, bounded in time: we + dance (present tense) + (having got) drunk → ‘we dance drunk,’ that is, the dancing eventuality occurs whenever the change of state occurs.<sup>31</sup> This habitual interpretation is not available when the

Some speakers claimed that example (ii) was perhaps possible, but it ‘did not sound Russian’. The exact structure of secondary predicates with non-finite predicates in the ESL languages is beyond the scope of this book. Suffice it to say that they do not constitute depictives, the topic of this chapter. I discuss *wh*-movement in depictive constructions in more detail in section 5.

<sup>30</sup> One native speaker accepted the instrumental Case-marked adjective in this example and claimed it had the same interpretation as the Russian and Ukrainian examples in (75) and (76).

<sup>31</sup> It has been claimed that in general adjectives describing psychological states cannot appear in the instrumental case in depictive constructions in Russian, unless the adjectival predicates explicitly





- (77) Každyj den' on \*vyp'et/ vypivaet (Russian)  
 every day he \*drinks-PF/ drinks-IMPF  
 po odnoj rjumke vodki.  
 po one glass vodka  
 'He drinks one (small) glass of vodka every day.'  
 (Dickey 2000: 53)

The examples under (75) and (76) above demonstrate that instrumental Case-marked predicative adjectives are perfectly acceptable in habitual contexts in both Russian and Ukrainian. As noted in chapter 2, the imperfective aspect generally occurs in habitual contexts in the ESL languages, whereas in the western group of Slavic languages (i.e. Czech, Slovak, and Slovene, as defined by Dickey 2000), the perfective aspect is completely acceptable in habituals, provided the eventuality is perceived as a TOTALITY on each individual repetition (Dickey 2000, 2005). That is, perfective verbal predicates in the western languages and instrumental Case-marked depictives in the eastern languages are possible when an eventuality holds for different subintervals of the Topic Time, as the diagram under (38) in chapter 2 illustrated, repeated below under (78).

- (78) ----- [ \_ [ \_ ] \_ \_ [ \_ ] \_ \_ [ \_ ] \_ ]<sub>TOPIC TIME</sub> -----

Eventuality holds for different subintervals of the Topic Time

The aspectual contrasts available in the adjectival predicate system in the East Slavic languages are therefore in keeping with aspectual contrasts possible in general across all the Slavic languages. The East Slavic languages are the only languages that exhibit an aspectual contrast in adjectival depictive constructions, thus supporting Dickey's claim that the Slavic languages can be divided into eastern and western groups based on their treatment of grammatical aspect. The aspectual contrast possible in depictives, however, extends beyond those present in the verbal systems of the East Slavic languages, but they are in keeping with possible aspectual contrasts evident across the Slavic languages in general. Therefore, the general pattern still holds that both perfective verbs and instrumental Case-marked depictive secondary predicates in the East Slavic languages denote eventualities that are bounded in time, whereas imperfective verbs and adjectives with Case agreement do not.

Thus far, I have focused on the interpretive differences between depictive adjectives with different Case marking and have shown that the East Slavic languages manifest an aspectual opposition morphologically in both their verbal and adjectival predicates. The following section outlines the syntax of depictives in the East Slavic languages.

#### 4. The syntax of depictives

As already discussed (see pp. 112–13), depictive secondary predicates are adjuncts, that is, they are not selected as an argument of the verb (unlike the predicates in so-called small clause constructions). It is generally claimed that in Russian, depictives are adjoined to a level within the verb phrase (Babby 1999; Bailyn and Rubin 1991; Bailyn 1995a, 2001; Franks 1995; and Richardson 2003a, 2003b, among others).<sup>33</sup> In Richardson 2006, I provide evidence from VP-ellipsis and pseudo-clefts to show that depictives are adjoined within the extended verb phrase in Ukrainian. My analysis of Ukrainian can be extended to both Belarusian and Russian to show that depictives with either an external or internal argument antecedent are adjoined to the (extended) verb phrase in the East Slavic languages. Notice, for instance, that in VP-ellipsis constructions the depictive is elided with the verb phrase in all three languages:

(79) *VP-ellipsis with an external argument antecedent:*

- a. Dzianis [pryjšoŭ dadomu z špitalja (Belarusian)  
 Dzianis-NOM arrived home from hospital  
 zdorovy/ zdorovym]<sub>VP-i</sub>, i Janka taksama [...]<sub>VP-i</sub>.  
 healthy-NOM/ healthy-INSTR and Janka also  
 ‘Dzianis arrived home from the hospital healthy and Janka did  
 so too.’
- b. Boris [prišel domoj iz bol’nicy (Russian)  
 Boris-NOM arrived home from hospital  
 zdorovyj/ zdorovym]<sub>VP-i</sub>, i Ivan tože [.....]<sub>VP-i</sub>.  
 healthy-NOM/ healthy-INSTR and Ivan also  
 ‘Boris arrived home from the hospital healthy and Ivan did  
 so too.’
- c. Borys [pryjšov dodomu z likarni (Ukrainian)  
 Borys-NOM arrived home from hospital  
 zdorovym<sub>i</sub>/ zdorovyj]<sub>VP-i</sub>, i Maksym takož [.....]<sub>VP-i</sub>.  
 healthy-INSTR/ healthy-NOM and Maksym-NOM also  
 ‘Borys came home from the hospital healthy and Maksym  
 did too.’

<sup>33</sup> See Andrews (1982), Geuder (2002), Roberts (1988), and Winkler (1997), among others, for evidence that in English depictives are inside the verb phrase. For the same claim for French, see Legendre (1997), and for Japanese, see Koizumi (1994b), among others.

(80) *VP-ellipsis with an internal argument antecedent:*

- a. Ira [pryvjala Ivana dadomu pjanaga/ (Belarusian)  
 Ira-NOM brought Ivan-ACC home drunk-ACC/  
 pjanym]<sub>VP-i</sub> i Palina taksama [. . . .]<sub>VP-i</sub>.<sup>34</sup>  
 drunk-INSTR and Palina-NOM also  
 'Ira brought Ivan home drunk and Palina did so too.'
- b. Ira [s''jela mjaso syrym]<sub>VP-i</sub> i Katja (Russian)  
 Ira-NOM ate meat raw-INSTR and Katja  
 tože [. . . .]<sub>VP-i</sub>.  
 also  
 'Ira ate the meat raw and Katja did so too.'
- c. Ira [zjila mjaso syrym]<sub>VP-i</sub> i Ljuda (Ukrainian)  
 Ira-NOM ate meat-ACC raw-INST and Ljuda  
 takož[. . . .]<sub>VP-i</sub>.  
 also  
 'Ira ate the meat raw and Ljuda did so too.'

These examples illustrate that the depictive adjective functions as a unit with the verb phrase, since the two can be elided together.<sup>35</sup>

Consider further the behaviour of (colloquial) pseudo-clefts in these languages (discussed for Russian in section 2 above). The following pseudo-cleft examples illustrate that the depictive and its antecedent do not function as a unit syntactically in all three languages, that is, the string NP–AP cannot be coindexed with a *wh*-pronoun in any of the languages:

(81) *Pseudo-clefts with external argument antecedents:*

- a. \*Xto<sub>i</sub> pryjšoŭ dadomu z špitalja— (Belarusian)  
 who-NOM arrived home from hospital  
 [Maksim zdarovy/ zdarovym]<sub>i</sub>.  
 Maksim healthy-NOM/ healthy-INSTR
- b. \*Kto<sub>i</sub> vernulsja domoj iz bol'nicy—(tak èto) (Russian)  
 who-NOM returned home from hospital (so this)  
 [Ivan p'janyj/ p'jany]<sub>i</sub>.  
 Ivan-NOM drunk-NOM/ drunk-INSTR

<sup>34</sup> This construction is awkward in Belarusian, since speakers would most naturally say *Ira i Palina/ Ira z Palinaj pryvjali Ivana dadomu pjanaga/pjanym* 'Ira and Palina/Ira with Palina brought Ivan home drunk'. One native speaker strongly preferred Case agreement on the adjective in the depictive secondary predicate construction *Ira pryvjala Ivana dadomu pjanaga* 'Ira brought Ivan home drunk.'

<sup>35</sup> Case agreement is infelicitous in examples (80b) and (80c) in Russian and Ukrainian. I assume that this is due to pragmatic reasons. That is, in these constructions focus is on the state of the meat at a particular point in time—the Topic Time, the time at which Ira ate it. It is pragmatically infelicitous to state that the meat remained raw beyond the Topic Time, i.e. after the eating eventuality, which is what an adjective with Case agreement would imply.

- c. \*Xto<sub>i</sub> pryjšov dodmu z likarni— (Ukrainian)  
 who-NOM arrived home from hospital  
 [Borys, zdorovyj/ zdorovym]<sub>i</sub>  
 Borys-NOM healthy-NOM/ healthy-INST

(82) *Pseudo-clefts with internal argument antecedents*:<sup>36</sup>

- a. \*Kago<sub>i</sub> milicyja pryvjala dadomu— (Belarusian)  
 who-ACC police-NOM brought home  
 [jago pjanaga/ pjanym]<sub>i</sub>.  
 him-ACC drunk-ACC/ drunk-INST
- b. \*Čto<sub>i</sub> ona s”jela—tak èto [mjaso (Russian)  
 what-ACC she-NOM ate so this meat-ACC  
 syrym]<sub>i</sub>.  
 raw-INST
- c. \*Ščo<sub>i</sub> vona zjila— [mjaso syrym]<sub>i</sub>. (Ukrainian)  
 what-ACC she-NOM ate meat-ACC raw-INST

These examples illustrate that the depictive and its antecedent do not form a unit syntactically, that is, the depictive secondary predicate is not adjoined to the NP itself as a type of modifier/attribute.

There is syntactic evidence that, although the depictive adjoins within the extended verb phrase, it adjoins at different levels, depending on the location of its antecedent, as the following examples illustrate:<sup>37</sup>

(83) *Hierarchies among adjunction sites in Belarusian*:

- a. ??Pryjaceli<sub>i</sub> pryvjali Telmana<sub>k</sub> dadomu pjanym<sub>k</sub>  
 friends-NOM brought Telman-ACC home drunk-INST.SG  
 cvjarozy<sub>i</sub>.  
 sober-INST.PL  
 ‘Friends brought Telman home drunk (but they were) sober.’
- b. \*Pryjaceli<sub>i</sub> pryvjali Telmana<sub>k</sub> dadomu cvjarozy<sub>i</sub>  
 friends-NOM brought Telman-ACC home sober-INST.PL  
 pjanym<sub>k</sub>.  
 drunk-INST.SG  
 (intended interpretation) ‘Friends brought Telman home  
 (and they were) sober, but Telman was drunk.’

<sup>36</sup> Recall from section 2 above that coindexation of the *wh*-element with the agreeing adjective is possible when the adjective has an NP modifier/attribute interpretation (and, for some speakers, an appositive interpretation). Coindexation is not possible with a depictive interpretation of the adjective. Crucially, there is a choice between an NP modifier/attribute or depictive interpretation in the Belarusian example.

<sup>37</sup> This pattern has also been noticed for other languages, including English (Winkler 1997, among many others), French (Legendre 1997), and Japanese (Koizumi 1994b).

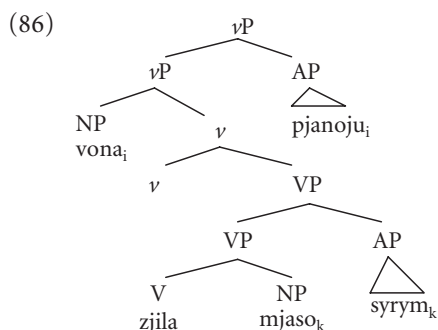
(84) *Hierarchies among adjunction sites in Russian:*

- a. Ona<sub>i</sub> s''jela mjaso<sub>k</sub> syrym<sub>k</sub> goloj<sub>i</sub>.  
 She-NOM ate meat-ACC raw-INSTR naked-INSTR  
 'She ate the meat raw naked.'
- b. \*Ona<sub>i</sub> s''jela mjaso<sub>k</sub> goloj<sub>i</sub> syrym<sub>k</sub>  
 She-NOM ate meat-ACC naked-INSTR raw-INSTR

(85) *Hierarchies among adjunction sites in Ukrainian:*

- a. Vona<sub>i</sub> zjila mjaso<sub>k</sub> syrym<sub>k</sub> pjanoju<sub>i</sub>.  
 she-NOM ate meat-ACC raw-INSTR drunk-INSTR  
 'She ate the meat raw drunk.'
- b. \*Vona<sub>i</sub> zjila mjaso<sub>k</sub> pjanoju<sub>i</sub> syrym<sub>k</sub>.  
 she-NOM ate meat-ACC drunk-INSTR raw-INSTR

These examples demonstrate that there is a hierarchical relationship between the adjunction sites of depictive secondary predicates. In the generative literature it has often been assumed that depictives with internal argument antecedents are attached close to V, for example to VP or, in earlier analyses, to V', whereas those with external argument antecedents are attached further away, for example to *v*P or, in earlier analyses, to VP (Culicover and Wilkins 1984; and Roberts 1988, among many others). In the spirit of previous work on the syntax of depictives, I assume that the depictive associated with the external argument adjoins to the *v*P level, whereas the depictive linked to the internal argument adjoins to the VP level. The following structure illustrates this pattern using Ukrainian. For the time being, I label the depictive as an AP. I will return to the exact structure of the depictive secondary predicate in section 5.



This configuration suggests that there is a c-command relationship between the depictive and its antecedent in the East Slavic languages, that is, the

depictive must be c-commanded by its antecedent (following the general convention that adjunction does not affect c-command relations, i.e. the node that ‘counts’ as the first-branching node for c-command in this configuration is the uppermost *vP* for *vona* or *VP* for *mjaso*).<sup>38</sup> Furthermore, the closest antecedent takes precedence for c-command, for example *mjaso* ‘meat’ is the closest c-commanding antecedent for *syrym* ‘raw’ in this configuration. This c-command relationship would explain why there is a hierarchical relationship between a depictive that refers to an external versus internal argument antecedent.

Support for the c-command constraint on depictives comes from Bailyn and Rubin’s (1991) observation that in Russian a depictive AP cannot refer to an NP contained within a PP. The following examples illustrate that this restriction holds for all of the East Slavic languages.

- (87) Barys<sub>i</sub> pagljadzeŭ [ na Ivana<sub>k</sub> ]<sub>PP</sub> golym<sub>i/\*k</sub>. (Belarusian)  
 Barys-NOM looked at Ivan-ACC naked-INSTR  
 ‘Barys looked at Ivan naked.’
- (88) Ivan<sub>i</sub> posmotrel [ na Borisa<sub>k</sub> ]<sub>PP</sub> golym<sub>i/\*k</sub>. (Russian)  
 Ivan-NOM looked at Boris-ACC naked-INSTR  
 ‘Ivan looked at Boris naked.’
- (89) Borys<sub>i</sub> podyvyvsja [ na Ivana<sub>k</sub> ]<sub>PP</sub> golym<sub>i/\*k</sub> (Ukrainian)  
 Borys-NOM looked at Ivan-ACC naked-INSTR  
 ‘Borys looked at Ivan naked.’

These examples illustrate that the depictive can only refer to the external argument in these constructions, since only the external argument can potentially c-command the depictive. They also provide further evidence that the depictive is adjoined to a level within the extended verb phrase, since c-command by an argument merged within a PP is ruled out (i.e. the depictive does not adjoin to the PP). This c-command constraint on depictives has been noticed in a variety of other languages, including English, Japanese, and Spanish, although it does not hold in all languages, for example it appears to be absent in Albanian and Venda.<sup>39</sup>

<sup>38</sup> C-command is defined as follows:  $\alpha$  c-commands  $\beta$  iff: (i)  $\alpha$  is distinct from  $\beta$ ; (ii)  $\alpha$  does not dominate  $\beta$  and  $\beta$  does not dominate  $\alpha$ ; and (iii) every node that dominates  $\alpha$  also dominates  $\beta$ .

<sup>39</sup> For comparative discussion of English, Japanese, Albanian, and Venda, see Pylkkänen 2002. For discussion of Spanish, see Demonte 1988.

The c-command constraint is not the only syntactic restriction on depictive secondary predication in the East Slavic languages. Recall the observation at the beginning of this chapter that not all accusative and dative arguments can serve as antecedents for depictives, as examples (6)–(10) from Russian illustrated, repeated below as (90)–(94).

- (90) Druz'<sub>i</sub>        priveli    ego        domoj        (ACC antecedent)  
 friends-NOM brought him-ACC home  
 p'jany<sub>m<sub>i</sub></sub>        (/p'janog<sub>i</sub>).  
 drunk-INSTR (/drunk-ACC)  
 'Friends brought him home drunk' ('he' is drunk).
- (91) Ivan<sub>i</sub>        tolknul    Boris<sub>a<sub>k</sub></sub>    p'jany<sub>m<sub>i</sub>/\*<sub>k</sub></sub>    (\*ACC antecedent)  
 Ivan-NOM pushed Boris-ACC drunk-INSTR  
 'Ivan pushed Boris drunk' (only Ivan can be drunk).
- (92) Ja<sub>i</sub>        dal        emu<sub>k</sub>        den'gi    p'jany<sub>m<sub>i</sub>/\*<sub>k</sub></sub>    (\*DAT antecedent)  
 I-NOM gave him-DAT money drunk-INSTR  
 'I gave him money drunk' (only I can be drunk).
- (93) \*Mne<sub>i</sub>    vse        nadoedaet    trezvym<sub>i</sub>.    (\*DAT antecedent)  
 I-DAT everything bores sober-INSTR  
 (intended interpretation) 'Everything bores me (when I'm) sober.'
- (94) Mne<sub>i</sub>    ne        rabotaetsja    p'jany<sub>m<sub>i</sub></sub>        (DAT antecedent)  
 I-DAT NEG work-[−AGR] drunk-INSTR  
 (/p'janom<sub>i</sub>).  
 (/drunk-DAT)  
 'I can't seem to work drunk.'

Bailyn (1995a) claims that only nominative external arguments and accusative internal arguments can serve as antecedents for instrumental Case-marked secondary predicates in Russian,<sup>40</sup> due to the configuration he posits for morphological Case in Russian. The examples under (90)–(94) illustrate that this generalization cannot be correct, since some accusative and dative arguments can serve as antecedents for a depictive, whereas others cannot. In the following sections I address the syntactic restrictions on depictives with different dative case-marked antecedents (sections 4.1 and 4.2) and accusative C/case-marked antecedents (section 4.3).

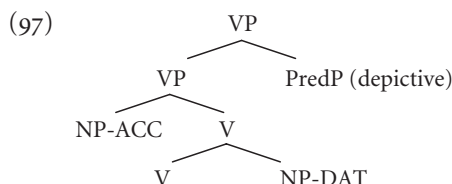
<sup>40</sup> In Bailyn 1995a only instrumental Case-marked APs (and NPs) constitute true secondary predicates. Those APs (or NPs) with Case agreement are treated as appositives.

## 4.1 Dative indirect object antecedents

Consider first the ungrammaticality of the depictive secondary predicate with the so-called dative indirect object in example (92) above, a pattern also found in Belarusian and Ukrainian, as the following examples illustrate.

- (95) \*Ja dala jamu<sub>i</sub> grošy pjanym<sub>i</sub>. (Belarusian)  
 I-NOM gave him-DAT money-ACC drunk-INTR
- (96) \*Vira dala jomu<sub>i</sub> groši pjanym<sub>i</sub>. (Ukrainian)  
 Vira-NOM gave him-DAT money-ACC drunk-INTR

In fact depictive secondary predication in general is not possible with a dative indirect object antecedent in the East Slavic languages (or in a number of other languages, as discussed in chapter 2, section 3.2). If we replace the adjective with instrumental Case marking in the constructions above with an adjective with Case agreement, the adjective has an appositive or NP attribute/modifier interpretation.<sup>41</sup> Bailyn (1995a) claims that (instrumental) depictive secondary predication is not possible with dative indirect objects because, like those arguments dominated by a PP, the dative argument is too low in the structure to c-command a depictive adjective. He posits the following configuration to account for this pattern:



Notice that in this configuration the dative argument is too low to c-command the depictive (PredP in Bailyn's analysis) adjoined to the VP level, since the first branching node dominating the dative argument is V. Bailyn's analysis obviously rests crucially on whether this is the correct ordering of accusative and dative arguments in Russian. Others (e.g. Franks 1995; Junghanns and Zybatow 1997; and Pereltsvaig forthcoming-a) have posited that the reverse order holds for dative and accusative arguments in Russian. In English it is also often thought that the indirect object is merged higher in a derivation than a direct object. There are a number of syntactic diagnostics that have been used to support the hierarchy indirect object–direct object in English, including: anaphoric binding; weak crossover effects; 'the each . . . the other' construction; and superiority, among

<sup>41</sup> In Richardson 2003a I mistakenly classified a number of NP modifier constructions with dative case agreement as depictive secondary predicates.



others (Barss and Lasnik 1986). These diagnostics are illustrated under (98)–(101) below.

- (98) *Anaphoric binding*:
- a. I showed Mary herself.
  - b. \*I showed herself Mary.
- (99) *Weak crossover effects*:
- a. \*What<sub>i</sub> did Mary give its<sub>i</sub> owner t<sub>i</sub>?
  - b. Who<sub>i</sub> did Mary give t<sub>i</sub> his<sub>i</sub> cheque?
  - c. \*Whose<sub>i</sub> pay did you send his<sub>i</sub> mother?
  - d. Which man<sub>i</sub> did you send his paycheck<sub>i</sub>?
- (100) *‘The each . . . the other’ construction*:
- a. I showed each man the other’s socks.
  - b. \*I showed the other’s friend each man.
- (101) *Superiority*:
- a. Who did you give which paycheck?
  - b. \*Which paycheck did you give who?

The contrasts under example (98) illustrate that only the indirect object can bind the (direct object) anaphor ‘herself’ in English. This suggests that the indirect object has scope over the direct object, but not vice versa, that is, the indirect object is merged higher in the derivation than the direct object. The East Slavic languages do not have an anaphor equivalent to ‘herself’ (or ‘himself’ or ‘themselves’) which can be bound by an internal argument. They do have a reciprocal anaphor ‘each other’, however, which can be bound by an internal argument and can occur in either the accusative or dative C/case. The distribution of this anaphor provides no insight into the hierarchical relationship between dative or accusative arguments in Russian, since either argument can take scope over the other, depending on a given construction. The distribution of this anaphor in Belarusian and Ukrainian, however, suggests that the accusative argument is merged higher in a derivation than the dative argument, as the examples under (103) and (104) demonstrate.<sup>42</sup>

<sup>42</sup> Bailyn (1995a: 100) discusses examples (102c) and (102d) and notes that both are possible, a finding that was not supported by my native informants. He claims that the dative cannot act as an antecedent for an anaphor in the accusative unless it scrambles to a position from which it can c-command the dative. For him, scrambling is obviously necessary given his hypothesis that the dative argument is merged lower than the accusative one.

(102) *Anaphoric binding in Russian:*

- a. Ja pokazala studentam drug drugu.  
I-NOM showed students-DAT each other-ACC  
'I showed the students to each other.'
- b. \*Ja pokazala drug drugu studentam.  
I-NOM showed each other-ACC students-DAT
- c. Mama predstavila Petrovyx drug drugu.  
Mama-NOM introduced Petrovyjs-ACC each other-DAT  
'Mum introduced the Petrovyjs to each other.'
- d. ??/\*Mama predstavila drug drugu Petrovyx.  
Mama-NOM introduced each other-DAT Petrovyjs-ACC

(103) *Anaphoric binding in Ukrainian:*

- a. Ja pokazala studentam odyń odnogo.  
I-NOM showed students-DAT each other-ACC  
'I showed the students to each other.'
- b. \*Ja pokazala odyń odnogo studentam.  
I-NOM showed each other-ACC students-DAT
- c. Mama predstavyla studentiv odyń odnomu.  
Mama-NOM introduced students-ACC each other-DAT  
'Mum introduced the students to each other.'
- d. Mama predstavyla odyń odnomu studentiv.  
Mama-NOM introduced each other-DAT students-ACC  
'Mum introduced the students to each other.'

(104) *Anaphoric binding in Belarusian:*

- a. \*Ja pakazala adzin adnago studentam.  
I-NOM showed each other-ACC students-DAT
- b. Ja pakazala adzin adnamu studentaŭ.  
I-NOM showed each other-DAT students-ACC  
'I showed the students to each other.'

Example (102a) in Russian illustrates that a dative argument can bind into an accusative reciprocal anaphor, but example (102c) shows that an accusative argument can also bind into a dative anaphor. Examples (102b) and (102d) suggest that the anaphor must be merged lower in the derivation than its antecedent, hence the ungrammaticality of these two examples when the anaphor precedes its antecedent, regardless of the C/case marking on the antecedent or the anaphor. That is, the C/case marking on the

antecedent itself tells us nothing about the hierarchical relationship between dative and accusative arguments in Russian. The anaphoric binding diagnostic is therefore inconclusive in Russian. Binding effects in Belarusian and Ukrainian, however, differ from those in Russian. Notice that in Ukrainian, like Russian, a dative argument can bind into the accusative anaphor (see example 103a), and an accusative argument can also bind into a dative anaphor (example 103c). Notice further, however, that unlike Russian, a dative anaphor can be merged higher in a derivation than its accusative antecedent (example 103d), but an accusative one cannot (see example 103b). This same pattern holds in Belarusian, as the examples under (104) demonstrate. These examples suggest that the accusative antecedent c-commands the dative anaphor, which in turn has scrambled to a higher position in examples (103d) and (104b), hence the grammaticality of these examples. By this reasoning, (103b) and (104a) are ungrammatical because the accusative anaphor is never c-commanded by the dative antecedent. That is, these examples suggest that the ACC-DAT hierarchy is correct in Belarusian and Ukrainian.

Consider now the weak crossover effects illustrated in the examples under (99) in English. Weak crossover effects arise when there is a possessive indirect object pronoun bound by a raised *wh*-direct object, hence the ungrammaticality of (99a), repeated below as (105).

(105) \*What<sub>i</sub> did Mary give its<sub>i</sub> owner t<sub>i</sub>?

This example illustrates that the direct object ('what') cannot bind into the indirect object 'its owner'. Weak crossover effects do not arise if the possessive is a direct object and the indirect object constitutes the *wh*-phrase, that is, the indirect object can bind into the possessive pronoun, as illustrated by example (99b) above, repeated below as (106).

(106) Who<sub>i</sub> did Mary give t<sub>i</sub> his<sub>i</sub> cheque?

The different grammaticality judgements of these two constructions suggest that the indirect object is merged higher in the derivation, since no weak crossover effects arise when the indirect object undergoes *wh*-movement. That is, only the direct object 'crosses' the possessive pronoun, thereby resulting in the weak crossover effects illustrated in example (105). The following examples illustrate that the weak crossover effects diagnostic is an inconclusive test for the hierarchical relationship between accusative and dative arguments in the East Slavic languages, since, in the right context, an accusative *wh*-phrase can bind into a possessive pronoun within a dative NP,

and a dative *wh*-phrase can bind into a possessive pronoun within an accusative NP:<sup>43</sup>

- (107) *Kakuju<sub>i</sub> vešč' Ira dala ee<sub>i</sub> vladelcu?* (Russian)  
 which-ACC thing-ACC Ira-NOM gave its owner-DAT
- (108) *Komu<sub>i</sub> Ira dala/ vernula ego<sub>i</sub> ček?*  
 who-DAT Ira-NOM gave/ returned his cheque-ACC  
 'Who did Ira give/return his cheque?'
- (109) *Kakoj<sub>i</sub> materi vy pokazali ee<sub>i</sub> rebenka?*  
 which-DAT mother-DAT you showed her child-ACC  
 'Which mother did you show her child to?'
- (110) *Kakogo<sub>i</sub> rebenka vy pokazali ego<sub>i</sub> materi?*  
 which-ACC child-ACC you showed its mother-DAT

In example (107) the accusative *wh*-element *kakuju* 'which' binds the pronoun *ee* (which in turn occurs within a dative NP). In example (108) the dative *wh*-element *komu* 'who' can bind the pronoun *ego* 'his' (which in turn occurs within an accusative NP). Evidence for the pattern that the dative can bind into the accusative NP comes from the fact that this question could be answered with a construction like the following:

- (111) *Emu (že) i dala (vernula)*  
 him-DAT (PART) and gave (returned)  
 'She gave/returned it to him.'

The dative pronoun *emu* 'him' in this construction is coreferential with the accusative pronoun *ego* 'him' in example (108). The following examples illustrate that weak crossover effects are also absent in Belarusian and Ukrainian.

- (112) *Jakoje dzicia vy pakazali jago<sub>i</sub> matuli?* (Belarusian)  
 which-ACC child-ACC you showed its mother-DAT
- (113) *Jakoj<sub>i</sub> matuli vy pakazali jejnaje dzicia?*  
 which-DAT mother-DAT you showed her child-ACC  
 'Which mother did you show her child to?'

<sup>43</sup> Pereltsvaig (forthcoming-a) states that Russian does have weak crossover effects, claiming that example (110) is ungrammatical in Russian. My native informants, however, maintained that *ego* 'his' in this example could be coreferenced with *kakogo rebenka* 'which child'; thus, for the time being I assume that weak crossover effects do not provide conclusive evidence about the ordering of dative and accusative arguments in Russian.

- (114) Jaku<sub>i</sub> dytnu vy pokazaly jiji<sub>i</sub> materi? (Ukrainian)  
 which-ACC child-ACC you showed her mother-DAT
- (115) Jakij materi vy pokazaly jiji<sub>i</sub> dytnu?  
 which-DAT mother-DAT you showed her child-ACC  
 'Which mother did you show her child to?'

These examples demonstrate that, as in Russian, *wh*-elements in the accusative can bind into a dative possessive pronoun (examples 112 and 114), and *wh*-elements in the dative can equally bind into an accusative possessive pronoun (examples 113 and 115). Thus, the weak crossover test is an inconclusive diagnostic for the hierarchical ordering of dative and accusative arguments in the East Slavic languages.

'The each... the other' constructions under example (100) above in English, repeated below under (116), illustrate that 'each' has to be contained within the same maximal projection as the indirect object and has to take scope over 'the other' in the projection of the direct object. This pattern also suggests that the indirect object is merged higher in a derivation than the direct object in English. The East Slavic languages exhibit this same pattern, as the examples under (117)–(119) illustrate.

- (116) 'The each... the other' construction in English:  
 a. I showed each man the other's socks.  
 b. \*I showed the other's friend each man.
- (117) 'The each... the other' construction in Russian:  
 a. My pokazali každomu mal'čiku velosiped drugogo.  
 we-NOM showed each-DAT boy-DAT bicycle-ACC other-GEN  
 'We showed each boy the other's bicycle.'  
 b. \*My pokazali každogo l'va treneru drugogo.<sup>44</sup>  
 we-NOM showed each-ACC lion-ACC trainer-DAT other-GEN  
 (intended interpretation) 'We showed each lion to the other's trainer.'  
 (Pereltsvaig, forthcoming-a)
- (118) 'The each... the other' construction in Belarusian:  
 a. My pakazali kožnamu xlopčyku rovar inšaga.  
 we-NOM showed each-DAT boy-DAT bicycle-ACC other-GEN  
 'We showed each boy the other's bicycle.'

<sup>44</sup> One native speaker accepted this construction.

- b. \*/?My pakazali kožnaga l'va dresirouščyku inšaga.  
 we-NOM showed each-ACC lion-ACC trainer-DAT other-GEN  
 (intended interpretation) 'We showed each lion to the other's  
 trainer.'

(119) *'The each... the other' construction in Ukrainian:*

- a. My pokazaly kožnomu xlopčyku velosyped inšogo.  
 we-NOM showed each-DAT boy-DAT bicycle-ACC other-GEN  
 'We showed each boy the other's bicycle.'
- b. \*My pokazaly kožnogo leva dresyruvalnyku inšogo.  
 we-NOM showed each-ACC lion-ACC trainer-DAT other-GEN  
 (intended interpretation) 'We showed each lion to the other's  
 trainer.'

These patterns suggest that, like English, the dative indirect object is merged higher in a derivation than the accusative in the East Slavic languages, since the dative argument has to take scope over the accusative.

Consider, finally, the superiority diagnostic in English under (101) above, repeated below as (120).

(120) *Superiority:*

- a. Who did you give which paycheck?  
 b. \*Which paycheck did you give who?

English is a language in which *wh*-movement of a single element occurs. Many speakers believe that in single *wh*-movement languages the highest *wh*-element must move (see N. Richards 2001 for discussion). The examples under (120) therefore suggest that the indirect object is merged higher than the direct object in English, since only the indirect object undergoes *wh*-movement. The ESL languages have multiple *wh*-movement, but only Russian imposes an ordering on its moved *wh*-elements.<sup>45</sup> This means that

<sup>45</sup> The following examples from Belarusian and Ukrainian illustrate that there is no ordering imposed on their *wh*-elements:

- |      |           |            |            |     |       |              |
|------|-----------|------------|------------|-----|-------|--------------|
| i.   | Kamu      | jaki       | ček        | ty  | daŭ?  | (Belarusian) |
|      | who-DAT   | which-ACC  | cheque-ACC | you | gave  |              |
| ii.  | Jaki      | ček        | kamu       | ty  | daŭ?  |              |
|      | which-ACC | cheque-ACC | who-DAT    | you | gave  |              |
| iii. | Komu      | jakyj      | ček        | vy  | daly? | (Ukrainian)  |
|      | who-DAT   | which-ACC  | cheque-ACC | you | gave  |              |
| iv.  | Jakyj     | ček        | komu       | vy  | daly? |              |
|      | which-ACC | cheque-ACC | who-DAT    | you | gave  |              |

the superiority diagnostic can only be used in Russian. In Russian, speakers unanimously favour *wh*-movement of the dative Case-marked element before movement of the accusative Case-marked *wh*-element, as the following examples illustrate (this pattern is also discussed in Pereltsvaig, forthcoming-a):

- (121) Komu      kakoj      ček              ty      dal?  
           who-DAT   which-ACC   cheque-ACC   you   gave
- (122) \*Kakoj      ček              komu      ty      dal?  
           Which-ACC   cheque-ACC   who-DAT   you   gave

Notice that even in the absence of multiple *wh*-movement, movement of the dative Case-marked *wh*-element is still preferred over movement of the accusative Case-marked element:

- (123) ?Komu      ty      dal      kakoj      ček?  
           who-DAT   you   gave   which-ACC   cheque-ACC  
           ‘Who did you give which cheque?’
- (124) \*Kakoj      ček              ty      dal komu?  
           which-ACC   cheque-ACC   you   gave who-DAT

Numerous scholars have provided evidence that in languages in which multiple *wh*-movement occurs (and there is an ordering imposed on these multiple fronted *wh*-words) the highest *wh*-element moves first, followed by movement of the next highest (Bošković 1999; Koizumi 1994a; N. Richards 2001; and Rudin 1988, among others). If these scholars are correct, then the examples in (121)–(124) suggest that the dative argument is merged higher in a derivation than the accusative one in Russian.

Thus, the ‘each . . . the other’ and the superiority diagnostics suggest that the dative argument is merged higher in a derivation than the accusative in Russian. The ‘each . . . the other’ and the anaphoric binding tests in Belarusian and Ukrainian, however, produce conflicting results. All the other diagnostics used to determine the hierarchical relationship between direct and indirect objects in English turn out to be inconclusive in the East Slavic languages.<sup>46</sup> The patterns in Russian suggest that the structure posited in Bailyn 1995a,

<sup>46</sup> Another potential test—scope possibilities—also turns out to be an inconclusive diagnostic in the East Slavic languages. Consider, for example, the following examples discussed in Ionin 2001.

i. Ja pokazala po krajnej mere odin fil’m každomu rebenku  
    I showed at least one-ACC film-ACC every-DAT child-DAT  
    ‘I showed at least one film to every child.’  
    ??(one > ∀), (∀ > one)

illustrated under (97) above is incorrect, that is, the dative argument is too low to c-command a depictive. The patterns in Belarusian and Ukrainian do not provide conclusive evidence that Bailyn's structure is correct for these two languages. There is, however, an alternative hypothesis that could account for the ungrammaticality of a depictive with an indirect object antecedent, while still maintaining Bailyn's insight that c-command is a necessary requirement for depictive secondary predication. As discussed in detail in chapter 2, following Marantz (1993), Pyłkkänen (2002), Anagnostopoulou (2003), Cuervo (2003), and Woolford (2006), among others, I assume that dative indirect objects are dominated by an additional layer of structure, such as a so-called applicative phrase,<sup>47</sup> and that this additional functional category is responsible for licensing the (inherent) dative argument both semantically and syntactically (Cuervo 2003). As mentioned in chapter 2, I leave open whether this applicative phrase is merged low in a derivation, as posited by Pyłkkänen (2002) for languages like English, or whether it is merged high, that is, above VP, as in Marantz 1993, Anagnostopoulou 2003, and Woolford 2006. Crucially, this additional layer of structure prevents a dative indirect object from c-commanding a depictive secondary predicate, a hypothesis stated explicitly in Pyłkkänen 2002 (for low applicatives). That is, just as depictives do not adjoin to PPs in the East Slavic languages (or English), they

- ii. Ja pokazala po krajnej mere odnomu rebenku každyj fil'm  
 I showed at least one-DAT child-DAT every film-ACC  
 'I showed every film to at least one child.'  
 ??(one >∀), (∀ > one)

According to Ionin, in these examples it is difficult to get a wide scope reading of the quantifier 'one' (i.e. a reading in which the specific interpretation holds, e.g. 'one specific film' or 'one specific child'), whereas the inverse scope reading (i.e. with *každyj* 'every') is available, regardless of the dative or accusative Case marking on this quantifier. This pattern suggests that neither C/case-marked argument clearly takes scope over the other. Belarusian exhibits a similar pattern (and Ukrainian mirrors the Russian state of affairs):

- iii. Ja pakazala prynamsi adnamu dzicjonku kožny fil'm. (Belarusian)  
 I showed at-least one-DAT child-DAT every-ACC film-ACC  
 'I showed every film to at least one child.'  
 (one >∀), (∀ > one)

Example (iii) in Belarusian shows that either the dative or accusative argument can take wide scope. These examples suggest that the location and case of the argument is irrelevant in determining scope possibilities, but rather features associated with the quantifiers are crucial; thus, scope cannot be used as a diagnostic for the hierarchical ordering of accusative and dative arguments in the East Slavic languages (see Ionin's work for further discussion of this phenomenon in Russian).

<sup>47</sup> Other scholars have also suggested that the indirect object is dominated by additional structure. Emonds (1976, 1985, 1987), for instance, among many others, posits that the indirect object is dominated by a (null) PP. This additional structure would also prevent the indirect object from c-commanding a depictive secondary predicate.



also do not adjoin to an ApplicP. Indirect objects, and correspondingly ApplicPs, have been said to stand outside the eventuality denoted by the verb (Marantz 1993: 146). Recall that depictives, on the contrary, are anchored to the eventuality described by the verb: they contribute a property that their antecedent has while participating in the eventuality described by the verb. In effect, this pattern is manifested syntactically in the East Slavic languages (and English): depictives only adjoin to *vP* or *VP*, never to *ApplicP*.

If depictives never adjoin to the applicative phrase in the East Slavic languages, a dative argument merged within the applicative phrase never constitutes the closest c-commanding antecedent for the depictive. Depictives are therefore ungrammatical with dative indirect object antecedents because the c-command constraint evident in depictive constructions in the ESL languages fails. Thus, we are able to maintain Bailyn's (1995a) insight that c-command is a necessary requirement for depictives in Russian (and by extension in Belarusian and Ukrainian) without relying on the problematic hypothesis that dative indirect objects are merged lower in a derivation than accusative ones.

#### 4.2 Dative 'subject' antecedents

Consider now the remaining two dative alternations in Russian, illustrated in examples (93) and (94) above, repeated below as (125) and (126).

- (125) Mne ne rabotaetsja p'janym (/p'janomu).  
 I-DAT NEG work drunk-INSTR (/drunk-DAT)  
 'I just can't seem to work drunk.'

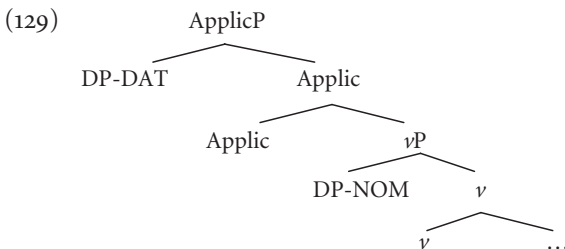
- (126) \*Mne vse nadoedaet trezvim.  
 I-DAT everything bores sober-INSTR  
 (intended interpretation) 'Everything bores me (when I'm) sober.'

Notice that the instrumental Case is possible on the secondary predicate in example (125), but not in (126), despite the dative Case marking on both antecedents. In fact, depictive secondary predication in general is ungrammatical in example (126) (an adjective with Case agreement has an appositive or attribute/modifier interpretation). This same pattern also exists in Ukrainian, as the following examples illustrate:<sup>48</sup>

<sup>48</sup> No depictive secondary predication is possible in the Belarusian equivalent of these constructions. I assume that the ungrammaticality of secondary predication in these constructions in Belarusian is linked to the greater restrictions on depictive secondary predication in Belarusian in general, as mentioned at the beginning of this chapter, i.e. it does not mean that the dative arguments in Belarusian differ structurally from those in Russian and Ukrainian.

- (127) Meni ne pratsjujetsja pjanym (/pjanomu).  
 I-DAT NEG work drunk-INSTR (/drunk-DAT)  
 'I can't seem to work drunk.'
- (128) \*Meni vse nabrydlo tverezym.  
 I-DAT everything bores sober-INSTR  
 (intended interpretation) 'Everything bores me (when I'm) sober.'

I assume that the Case-marking dichotomy evident in examples (125)–(128) is also linked to the presence versus absence of an applicative phrase. Recall from chapter 2 that I follow Cuervo (2003) in the claim that so-called dative experiencers in constructions like (126) and (128) are also dominated by an applicative phrase which, again, is responsible for licensing the dative argument both semantically and syntactically. As with dative indirect objects, I assume the existence of this applicative phrase prevents the dative experiencer from c-commanding a depictive, hence the ungrammaticality of depictive secondary predication in examples (126) and (128) above in Russian and Ukrainian, respectively.<sup>49</sup> Cuervo (2003: 139) posits the following configuration for dative experiencer constructions in Spanish:<sup>50</sup>



In Spanish and the East Slavic languages the verb agrees in gender, number, and person with the nominative Case-marked argument in dative experiencer constructions, not the dative one. This suggests that the verb and nominative Case-marked argument form a subject-predicate relation and that the nominative argument enters into Agree with the phi-features of T. The dative argument, on the contrary, is external to this predication relation and constitutes an inherent case assigned within an applicative phrase, which in turn is merged outside the extended verb phrase ( $vP$ ). A dative experiencer in the configuration under (129) above could still c-command a depictive adjoined to  $vP$ , but it would not constitute the closest antecedent for the depictive

<sup>49</sup> This pattern also holds in Spanish, as demonstrated in chapter 2.

<sup>50</sup> Cuervo provides evidence from possessive constructions in Spanish to support the existence of this hierarchical relationship. See her analysis for discussion.

(as discussed above on pp. 137–9). Thus, like dative indirect objects, dative experiencers do not constitute antecedents for depictives because both are merged within an applicative phrase and neither is in a (closest) c-command relationship with the depictive.<sup>51</sup>

Consider now the grammaticality of depictive secondary predication in examples (125) and (127) in Russian and Ukrainian, respectively, repeated below as (130) and (131). Unlike the dative experiencer constructions in examples (126) and (128) above, a depictive can occur in these constructions:

- (130) Mne ne rabotaetsja p'janym (/p'janomu). (Russian)  
 I-DAT NEG work drunk-INSTR (/drunk-DAT)  
 'I just can't seem to work drunk.'

- (131) Meni ne pratsjujetsja pjanym (/pjanomu). (Ukrainian)  
 I-DAT NEG work drunk-INSTR (/drunk-DAT)  
 'I can't seem to work drunk.'

The crucial difference between the dative arguments in these examples versus the datives in examples (126) and (128) above is that the dative arguments in these examples do not constitute dative experiencers. As Cuervo (2003) notes, with dative experiencers the eventuality described by the verb phrase is oriented towards the dative argument (hence literal translations of constructions like Russian *Mne nravitsja eta kniga* as 'That book is pleasing/agreeable to me'). The eventuality denoted by the verb phrase in constructions like (130) and (131) above is not oriented towards the dative arguments, instead the dative argument resembles an agent more than an experiencer. Furthermore, unlike the examples under (126) and (128) there is no agreement morphology on the verbal predicate in these examples. It is common knowledge that some dative arguments also occur in constructions in which the verb lacks agreement morphology and the dative argument does not constitute an experiencer (often these constructions convey a nuance of modality). Consider, for instance, the status of the dative argument in an example like (132) below in Russian.<sup>52</sup>

<sup>51</sup> Furthermore, if we change the c-command constraint to a mutual c-command constraint, then only the argument merged in spec,  $\nu P$  would be in a mutual c-command relationship with the depictive adjoined to  $\nu P$ .

<sup>52</sup> Dative experiencers also occur in constructions in which the verb lacks any agreement morphology, as example (i) below in Russian illustrates.

- i. Mne bylo grustno včera večerom.  
 I-DAT was-[−AGR] sad-[−AGR] last night  
 'I was sad last night.'

As stated above, dative experiencers are merged outside the  $\nu P$  and therefore do not enter into any agreement relationship with the verb (and correspondingly with T), hence the default neuter morphology on the predicate in constructions like these.

- (132) Emu            nas            ne            obmanut'.  
          him-DAT    us-ACC    NEG    to-deceive  
          (roughly) 'It's not for the likes of him to deceive the likes of us.'

The verb in this construction is non-finite and dative case marking is obligatory on the argument. The constructions in examples (130) and (131) above resemble example (132) in that the verb lacks agreement morphology and the dative argument does not constitute an experiencer. I assume that the dative case on the argument in examples like these does not constitute an inherent case-marked argument licensed semantically and syntactically by an applicative phrase. That is, I follow Schoorlemmer (1995) in the claim that dative experiencers differ from other so-called dative SUBJECTS.<sup>53</sup> These other datives constitute true external arguments, that is, they are merged within *v*P and can therefore c-command a depictive secondary predicate adjoined to this level. For the time being, I assume that the dative case marking on these arguments is the default dative assigned to an external argument in spec, *v*P when T is absent or phi-incomplete, as posited in Richardson 2003a, and also suggested, using different terminology, in Franks 1990.<sup>54</sup>

Thus far, I have focused on the restrictions of depictive secondary predication with dative antecedents. In the next section I address restrictions on depictives with accusative antecedents.

#### 4.3 Restrictions on depictives with accusative antecedents

Recall the contrast between examples (6) and (7) in Russian discussed at the beginning of this chapter, repeated above as (90) and (91) and below as (133) and (134).

- (133) Druz'ja            priveli    ego            domoj p'janym<sub>i</sub>            (/p'janogo<sub>i</sub>).  
          friends-NOM brought him-ACC home drunk-INSTR (/drunk-ACC)  
          'Friends brought him home drunk' (Ivan is drunk).
- (134) Ivan<sub>i</sub>            tolknul    Borisak            p'janym<sub>i/\*k</sub>  
          Ivan-NOM pushed Boris-ACC drunk-INSTR  
          'Ivan pushed Boris drunk' (only Ivan can be drunk).

<sup>53</sup> See her work for the claim that dative experiencers are not true SUBJECTS (i.e. external arguments) in Russian and that they do not receive a structural Case.

<sup>54</sup> I leave open whether the dative in these constructions is potentially the morphological manifestation of modal features (cf. Bailyn 2004). What is crucial for my purposes is that these dative arguments differ both semantically and syntactically from dative experiencers, hence their ability to c-command a depictive secondary predicate.

As discussed at the beginning of this chapter, depictive secondary predication is only possible with the accusative antecedent in example (133) in which the adjective can either occur with Case agreement or with instrumental Case marking. No adjective with instrumental Case marking is possible in example (134). Furthermore, an adjective with Case agreement in this example has either an appositive or NP modifier/attribute interpretation. This same pattern also exists in Belarusian and Ukrainian, as the following examples illustrate:

- (135) *Milicyja pryvjala jago<sub>i</sub> dadomu pjanaga<sub>i</sub>/ (Belarusian)*  
 police-NOM brought him-ACC home drunk-ACC/  
*pjanym<sub>i</sub>.*  
 drunk-INSTR  
 'The police brought him home drunk.'
- (136) *Palina šturxnula Ivana<sub>i</sub> pjanaga<sub>i</sub>/ \*pjanym<sub>i</sub>.*  
 Palina-NOM pushed Ivan-ACC drunk/ \*drunk-INSTR  
 'Palina pushed Ivan (and Ivan was) drunk.'
- (137) *Milicija pryvela jogo<sub>i</sub> dodomu pjanogo<sub>i</sub>/ (Ukrainian)*  
 police-NOM brought him-ACC home drunk-ACC/  
*pjanym<sub>i</sub>.*  
 drunk-INSTR  
 'The police brought him home drunk.'
- (138) *Svitlana štovxnula Maksyma<sub>i</sub> pjanogo<sub>i</sub>/ \*pjanym<sub>i</sub>.*  
 Svitlana-NOM pushed Maksym-ACC drunk-ACC/ \*drunk-INSTR  
 'Svitlana pushed Maksym (and Maksym was) drunk.'

The instrumental versus Case agreement alternation in examples (133), (135), and (137) in all three languages conveys the same aspectual contrasts discussed in section 3. That is, the adjective with Case agreement simply describes the antecedent's state, whereas the adjective with instrumental Case marking implies a change of state.<sup>55</sup> The question that arises is why depictive secondary predication is ungrammatical when an antecedent constitutes an accusative

<sup>55</sup> These constructions are based on Nichols' (1981: 156) examples of this pattern in Russian. Nichols notes that some Russian speakers did not accept the instrumental Case with an accusative antecedent when *milicija* 'police' constituted the external argument, but the instrumental Case was acceptable when *druz'ja* 'friends' was the external argument. My fieldwork leads me to believe that this difference is related purely to cultural or pragmatic expectations, i.e. an instrumental Case-marked adjective implies that the antecedent got drunk with the police and they brought him home in this state, yet it is unlikely for Russians to get drunk with the police, hence the marginal status of instrumental Case marking on the depictive for some speakers in a construction like *Milicija privela Ivana domoj p'janym* 'The police brought Ivan home drunk.'

Case-marked internal argument of a so-called SURFACE-CONTACT verb like *push*, whereas all other accusative arguments (with non-stative verbs) can antecede a depictive secondary predicate in the East Slavic languages (provided no 'semantic mis-match' occurs between the primary and secondary predicate with activities, as discussed above). In fact, this pattern holds for all surface-contact verbs in the East Slavic languages, for example it also holds with verbs like *hit*, *kick*, *slap*, etc.

A number of scholars have suggested that the internal argument of surface-contact verbs is really equivalent to an indirect internal argument (i.e. an indirect object) or to an internal argument merged within a PP. Verkuyl (1993: 330), for instance, suggests that *push* could be analysed as a complex verb which can be paraphrased as 'to give one or more pushes to' or 'to exert force to', that is, the paraphrases of this type of verb require the kinds of prepositional phrases typical of indirect object constructions in English. These sorts of paraphrases are not possible for other types of verbs, for example, 'I broke the window' cannot be paraphrased as 'I gave the window a break' (Levin and Rappaport Hovav 2005: 22). Furthermore, as noted by Levin and Rappaport Hovav (2005), in many languages surface-contact verbs take oblique complements or verb-noun combinations reminiscent of the English paraphrase 'I gave Joshua a push/kick' for 'I pushed/kicked Joshua' (e.g. in Tibetan, and the Caucasian languages).<sup>56</sup> In Spanish, some surface-contact verbs take arguments in the dative case. Example (139) below, for instance, illustrates that the verb *hit* merges with a dative argument (and the dative clitic characteristic of applicative phrases in Spanish).

- (139) Juanita le            pegó    a la gata.  
        Juanita CL-DAT hit        the cat-DAT  
        'Juanita hit the cat.'

As in English, surface-contact verbs like *hit* in Spanish can be paraphrased with a verb phrase like 'to give a blow to', as the example under (140) illustrates. In this example the dative case occurs on the indirect object and the dative clitic characteristic of applicative phrases arises:

- (140) Juanita le            dió    una puña a la gata.  
        Juanita CL-DAT gave a        blow the cat-DAT  
        'Juanita gave a blow to the cat/hit the cat.'

The dative indirect object in this example is semantically equivalent to the dative argument in example (139) above. Based on patterns like these, Cuervo

<sup>56</sup> See Nichols (1982, 1984) for discussion of this phenomenon in the Caucasian languages.

(2003) claims that the dative argument with a surface-contact verb like *hit* in Spanish is dominated by an applicative phrase, that is, it is equivalent to a dative indirect object.

In the spirit of a number of scholars who have suggested that the internal arguments of surface-contact verbs are not true direct objects (Cuervo 2003; Harley 2005; Levin and Rappaport Hovav 2005; and Verkuyl 1993, among others), I assume that the accusative argument of surface-contact verbs in the ESL languages is dominated by an additional layer of structure—either an applicative phrase (Cuervo 2003) or a PP (Verkuyl 1993). Thus, like dative indirect objects, dative experiencers, and arguments merged within a PP in general, these internal arguments cannot c-command a depictive secondary predicate.<sup>57</sup>

Obviously, what sets surface-contact verbs apart from other dative (indirect object) structures in the ESL languages is the presence of accusative Case marking on the internal argument of these verbs instead of the dative Case typically assigned within an applicative phrase. That is, the internal argument of surface-contact verbs appears to merge with an applicative head that does not assign case, or anomalously assigns the accusative Case (this accusative Case marking is not anomalous if we assume the presence of a null PP instead of an ApplicativeP with these verbs). As is well known, the internal argument with surface-contact verbs does not always behave more like an indirect object than a direct object. If we add a PP to the verb ‘push’ in English, for instance, creating a verb phrase like ‘push the cart to the wall’, the verb and the internal argument can no longer be paraphrased with a light verb construction like ‘to give a push to’. Merging a PP and a prefix with verbs like *push* in the East Slavic languages also changes their behaviour syntactically. Notice, for instance, that depictive secondary predication becomes possible once *push* does not mean ‘to give a push to’, as examples (141) and (142) illustrate:

- (141) Ja pri-tolkal telegu<sub>i</sub> k stene polnoj<sub>i</sub> (/gruženoj<sub>i</sub>). (Russian)  
 I pushed cart-ACC to wall full-INSTR (/full-INSTR)  
 ‘I pushed the cart to the wall full.’
- (142) Svitlana vy-štovxnula Ivana<sub>i</sub> z potjagu (Ukrainian)  
 Svitlana pushed Ivan-ACC from train  
 pjany<sub>i</sub>.  
 drunk-INSTR  
 ‘Svitlana pushed Ivan out of the train drunk.’

<sup>57</sup> See Richardson 2006 for the claim that these surface-contact verbs are derived from a denominal root (in Ukrainian).

In effect, the addition of a prefix (and a PP) to these surface-contact verbs changes their event structure: they become telic (accomplishments), rather than atelic (semelfactives). If it turns out that the internal arguments of surface-contact verbs are dominated by an applicative phrase in the East Slavic languages (and not an accusative C/case-assigning null preposition), then, for the time being, I assume that the lack of dative Case marking with these verbs is due to the influence of their [quantized] base verb. Like numerous other verbs, the event structure of surface-contact verbs can change, depending on the elements with which they merge in the syntax; that is, as discussed in chapter 3, they belong to the [quantized] class of verbs. In chapter 3, I demonstrated that accusative Case-marked internal arguments merge with those verbs whose event structure is compositional in the Slavic languages. Thus, for the time being, I assume that the accusative Case has spread to all internal arguments of surface-contact verbs in the East Slavic languages by analogy with the Case-valuing properties of [quantized] verbs in general (although I leave open the possibility that a null PP is assigning the accusative Case with these verbs). This has rendered the applicative phrase dominating these arguments defective in the sense that it does not assign an (inherent) dative case to the goal/beneficiary argument.

The patterns outlined above have provided support for the claim in Bailyn 1995a that depictive secondary predication in Russian is sensitive to a c-command constraint. I have shown that this constraint also exists in Belarusian and Ukrainian, but that it cannot be linked to the C/case on an antecedent in any of the East Slavic languages (contra Bailyn's (1995a) claim for Russian), that is, only some accusative arguments (not all) can antecede a depictive. Furthermore, some dative arguments can also antecede a depictive. The final syntactic problem remaining is how Case is valued in depictive secondary predicate constructions. This question is addressed in the following section.

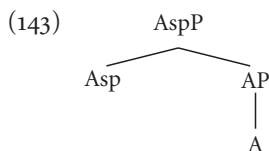
## 5. The syntax of Case in East Slavic depictives

In this section I suggest that the instrumental Case on depictive adjectives (and nominals) is the morphological manifestation of the [+bounded] feature of an AspP that immediately dominates the depictive secondary predicate. Case agreement, on the contrary, arises via feature valuing (sharing) in the same manner as Case and phi-agreement occur between elements such as a determiner, AP, DP, and verb, as discussed in chapter 3. I will demonstrate that in Russian only instrumental Case-marked depictives are dominated



by an AspP, whereas in Belarusian and Ukrainian all depictives are dominated by this additional layer of structure, regardless of their Case marking.

As is well known, it is generally assumed that grammatical functions, such as tense, project their own functional projection, such as a tense phrase (TP). The imperfective–perfective contrast evident in the verbal systems of the Slavic languages is a grammatical function; thus, it is reasonable to assume that it too projects a level of functional structure in the syntax of the Slavic languages—an AspP. In the spirit of Schoorlemmer (1995: 86), I assume a parameter exists in language, whereby any language that uses morphology to express aspectual oppositions has an AspP as part of its array of functional categories. As illustrated in section 2 of this chapter, depictive adjectival predicates in the East Slavic languages use Case morphology to express an aspectual contrast; thus, we would expect these adjectives to be dominated by an AspP in the syntax. We would expect them to occur, for instance, in a configuration such as the following:



The hypothesis that depictive adjectives are dominated by an additional layer of functional structure finds support in *wh*-movement facts. More precisely, *wh*-movement patterns in Belarusian and Ukrainian suggest that an AspP is present in all depictives, whereas in Russian they suggest that only depictives with instrumental Case marking are dominated by this additional layer of structure (as suggested in Richardson 2003a, 2006). Consider the patterns in the following examples, for instance. These examples show that a depictive AP with either Case agreement or instrumental Case marking can undergo *wh*-movement in both Belarusian and Ukrainian, but in Russian only an instrumental Case-marked AP can undergo movement.

(144) *Wh-extraction of Depictive Adjectives in Belarusian:*

- a. Jaki<sub>i</sub>/                      Jakim<sub>i</sub>                      Maksim   pryjšoŭ   dadomu  
     what-state-NOM/   what-state-INSTR   Maksim   arrived   home  
     z                      špitalja t<sub>i</sub>?  
     from   hospital?  
     ‘In what state did Maksim arrive home from the hospital?’  
     (Possible answer: zdorovy-NOM/zdorovym-INSTR ‘healthy’).

- b. Jakoga<sub>i</sub>/                      Jakim<sub>i</sub>                      jany    pryvjali    jago  
     what-state-ACC/    what-state-INSTR    they   brought   him  
     dadomu t<sub>i</sub>?  
     home?  
     'What state did they bring him home in?'  
     (Possible answer: pjanaga-ACC/pjanym-INSTR 'drunk'.)

(145) *Wh-extraction of Depictive Adjectives in Ukrainian:*<sup>58</sup>

- a. Jakyj<sub>i</sub>/                      Jakym<sub>i</sub>                      Borys            pryjšov  
     what-state-NOM/    what-state-INSTR    Borys-NOM   arrived  
     dodomu    z            likarni            t<sub>i</sub>?  
     home        from    hospital  
     'In what state did Borys arrive home from hospital?'  
     (Possible answer: zdorovyj-NOM/zdorovym-INSTR 'healthy'.)
- b. Jakogo<sub>i</sub>/                      Jakym<sub>i</sub>                      milicija            pryvela  
     what-state-ACC/    what-state-INSTR    police-NOM   brought  
     jogo            dodomu t<sub>i</sub>?  
     him-ACC    home  
     'In what state did the police bring him home?'  
     (Possible answer: pjanogo-ACC/pjanym-INSTR 'drunk'.)

(146) *Wh-extraction of Depictive Adjectives in Russian:*<sup>59</sup>

- a. Kakim<sub>i</sub>/                      \*Kako<sub>i</sub>                      Ivan            prišel  
     what-state-INSTR/    \*what-state-NOM    Ivan-NOM   arrived  
     domoj    iz            bol'nicy t<sub>i</sub>?  
     home    from    hospital  
     'In what state did Ivan arrive home from the hospital?'  
     (Possible answer: p'janym-INSTR 'drunk'.)
- b. Kakim<sub>i</sub>/                      \*Kakogo<sub>i</sub>                      milicija            privela  
     what-state-INSTR/    \*what-state-ACC    police    bring  
     Ivana            domoj t<sub>i</sub>?  
     Ivan-ACC    home  
     'In what state did the police bring Ivan home?'  
     (Possible answer: p'janym-INSTR 'drunk'.)

<sup>58</sup> A couple of Ukrainian native speakers mentioned that the *wh*-element with Case agreement in these examples was probably incorrect according to the prescriptive norms, but nevertheless they would either still use them themselves and/or they hear them in the spoken language.

<sup>59</sup> The adjective with Case agreement in these Russian constructions is only grammatical with the interpretation 'which Ivan', i.e. not 'in what state'. That is, the *wh*-element has moved from its position as a modifier of the NP within the verb phrase, rather than from its location as a depictive adjoined to the verb phrase.

If we follow the popular convention that *wh*-movement takes place via cyclic movement through various specifier positions, an additional level of functional structure (an AspP) dominating a depictive secondary predicate would provide a position into which an adjective can move if it has *wh*-features. That is, the specifier position of the AspP would provide an ‘escape hatch’ for *wh*-movement, enabling a *wh*-element to move to escape cyclic spell-out and to be available for further movement.<sup>60</sup> This means that AspP in the East Slavic languages essentially behaves like *ν*P, that is, the left periphery of both projections can contain material which is able to be extracted (see Chomsky 2001 for further discussion of the status of *ν*P). The patterns in examples (144) and (145) suggest that all depictives are dominated by an AspP in Belarusian and Ukrainian, since depictives with Case agreement or instrumental Case marking can undergo *wh*-movement (i.e. they have a position into which they can move to escape spell-out), whereas the examples under (146) suggest that in Russian only those adjectives with instrumental Case marking are dominated by an AspP, since only depictives with instrumental Case marking can undergo *wh*-movement.

The hypothesis that only instrumental Case-marked depictives are dominated by an additional layer of functional structure in Russian is not new. Bailyn and Rubin (1991) and Bailyn (1995a), for instance, come to a similar conclusion. For them, only instrumental Case-marked adjectives are dominated by what they refer to as a predicate phrase (PredP). In essence, this means that only instrumental Case-marked depictives constitute true predicates. This hypothesis, however, fails to account for the depictive interpretation speakers have of adjectives with Case agreement in Russian, an interpretation that is supported by syntactic tests, as demonstrated above. For these speakers, there is nothing more or less ‘predicative’ about an AP with Case agreement versus one with instrumental Case marking. Replacing a PredP with an AspP eliminates the problem inherent in associating only instrumental Case-marked depictives with predication in Russian. Furthermore, it is not clear how the PredP analysis could be extended to Belarusian and Ukrainian—both languages in which depictive APs with Case agreement exhibit identical syntactic behaviour to depictive APs with instrumental Case marking.

Consider now how Case valuing occurs with instrumental Case-marked depictives. In keeping with the hypotheses regarding Case in chapter 3, I assume that the instrumental Case is the morphological manifestation of

<sup>60</sup> In *Derivation by Phase* (Chomsky 2001), multiple cyclic spell-out is posited as a means to limit the scope of syntactic operations, i.e. it serves to limit the computation to manageable chunks. See Chomsky 2001 for further discussion of the notion of cyclic spell-out.

a [+bounded] AspP, that is, it is directly linked to the featural composition of a functional category (AspP). I also assume that the predicate values its phi-features with the phi-features on its antecedent, since secondary predicates express no phi-information not already conveyed by their antecedent. Phi-agreement occurs via the feature-sharing version of Agree discussed in chapter 3, repeated below under (147).

(147) *Agree (Feature-sharing version)* (Pesetsky and Torrego 2004: 4)

- (i) An unvalued feature  $F$  (a *probe*) on a head  $H$  at a syntactic location  $\alpha(F_\alpha)$  scans its c-command domain for another instance of  $F$  (a *goal*) at location  $\beta(F_\beta)$  with which to agree.
- (ii) Replace  $F_\alpha$  with  $F_\beta$ , so that the same feature is present in both locations.

Case agreement on the depictive occurs when the predicate values both its phi- and Case features with its antecedent via (the feature-sharing version of) Agree. That is, there is no morphological Case associated with the notion of unboundedness in the East Slavic languages. In Belarusian and Ukrainian Case agreement therefore occurs via Agree, despite the presence of an AspP in all depictives in these two languages. Thus, an AspP dominating the secondary predicate with a [+bounded] feature blocks Case sharing between the secondary predicate and its antecedent, but it does not block phi-agreement, and an AspP with a [−bounded] aspectual feature does not block Case sharing via Agree.

The hypothesis that the instrumental Case is the morphological manifestation of a [+bounded] feature in AspP means that, like the accusative Case, it is a structural Case. Support for the status of instrumental Case marking in depictives as a structural Case comes from the ungrammaticality of instrumental Case marking on a secondary predicate with a lexical case-marked antecedent. That is, in the East Slavic languages, secondary predicates with instrumental Case marking cannot refer to an antecedent with lexical case marking (unless the antecedent has lexical instrumental case marking). Notice, for instance, that the dative case is obligatory in a construction like (148) below in Ukrainian.

- (148) Vira            perečyla            čolovikovi<sub>i</sub>    pjanomu<sub>i</sub>.  
 Vira-NOM contradicted husband-DAT drunk-DAT  
 ‘Vira contradicted her husband (and he was) drunk.’

That the instrumental Case is ungrammatical on the depictive AP with lexical case-marked antecedents suggests that the instrumental is a structural Case, not a lexical one, since, like structural Cases in general, it cannot take

precedence over lexical case assignment (as discussed extensively in chapter 2).<sup>61</sup> As illustrated throughout this chapter, the instrumental Case on a depictive can take precedence over other structural (and default dative) C/cases.

The main syntactic difference in the treatment of depictives in the East Slavic languages is clearly the existence of an AspP dominating all depictives in Belarusian and Ukrainian versus its absence in Russian depictives with Case agreement. The presence versus absence of a particular functional category across languages should not strike us as surprising, given the observation in Thráinsson 1996 that functional categories are parametricized across different languages. It is common knowledge that the imperfective aspect (i.e. the unbounded aspect) has the widest distribution in Russian, a pattern which led Jakobson (1957/1971) to claim (in structuralist terms) that the imperfective is the so-called UNMARKED member of the imperfective–perfective opposition. I assume that Russian native speakers set a parameter, whereby an AspP is merged with bounded APs in depictives, but not with unbounded ones because the presence of an AspP with an unbounded feature is deemed superfluous. That is, an unbounded interpretation automatically arises in the absence of an AspP, since unboundedness is the default interpretation in general in Russian (a hypothesis supported by the fact that it has the widest distribution). Belarusian and Ukrainian, in a sense, leave nothing to chance and merge an AspP in all depictive constructions, which in turn has implications for other areas of their syntax, as the contrasts in *wh*-movement possibilities illustrated above demonstrated.

## 6. Conclusion

This chapter has provided a solution to another puzzling C/case-marking dichotomy in the Slavic languages—the instrumental versus Case agreement opposition in depictive secondary predicate constructions in the East Slavic languages. It has also provided support for Dickey's (2000, 2005) claim that the Slavic languages can be divided into eastern and western groups according to an aspectual parameter, in that it has shown that (of those languages with

<sup>61</sup> In effect, true depictives are very rare with lexical case-assigning verbs. Recall from chapter 3 that all lexical case-assigning verbs in the Slavic languages are atelic, i.e. they are states and activities (or semelfactives). As discussed on pp. 120–2 depictives do not occur with states. Furthermore, depictive secondary predication is rare with activities, unless an appropriate context is established in which a 'semantic mis-match' does not occur between the primary and secondary predicate (Koizumi 1994b).

rich morphological C/case systems) only the eastern group of languages use Case morphology to manifest a grammatical aspectual opposition in their depictive secondary predicate constructions. In fact, this pattern is not limited to depictive secondary predicates in the East Slavic languages, it is also found in predicative participle constructions in Russian and in copular constructions in all three East Slavic languages, as the following chapter will illustrate.

## Extensions of the Link between Case and Grammatical Aspect

### 1. Introduction

In this chapter I focus on additional Case-marking patterns which support the hypothesis posited in chapter 4 that Case and grammatical aspect are intimately connected. There are two additional constructions which demonstrate that the instrumental–Case agreement dichotomy in the East Slavic languages manifests an aspectual contrast: predicative participle constructions in Russian (these are unproductive in Belarusian and Ukrainian), and copular constructions in all three languages. These two types of predicate constructions are illustrated under examples (1)–(2) below. The patterns illustrated in Ukrainian under (2) are representative of the patterns in Belarusian and Russian also.

(1) *Predicative participles in Russian:*

- a. Ja            videla    Ivana<sub>i</sub>        prygajuščego<sub>i</sub>/    prygajuščim<sub>i</sub>    čerez  
      I-NOM    saw        Ivan-ACC    jumping-ACC/    -INSTR        across  
      ručej.  
      stream  
      ‘I saw the eventuality of Ivan jumping across the stream.’  
      ‘I saw Ivan as he was jumping across the stream.’  
      ‘I saw (the) Ivan who was jumping across the stream.’ (accusative  
      Case only)  
      ‘I saw Ivan (who was) jumping across the stream.’ (accusative  
      Case only)

- b. Druz'ja            priveli    Ivana<sub>i</sub>    domoj    oruščego<sub>i</sub>/    oruščim<sub>i</sub>  
 Friends-NOM brought Ivan-ACC home yelling-ACC/ -INSTR  
 blatnye    pesni.<sup>1</sup>  
 thieves'    songs  
 'His friends brought Ivan home yelling thieves' songs.'

(2) *Copular constructions in Ukrainian:*

- a. Maksym            učytel' /            \*učytelem.  
 Maksym-NOM teacher-NOM/ \*-INSTR  
 'Maksym is a teacher.'
- b. Maksym    pjanyj /            \*pjany.  
 Maksym drunk-NOM/ \*-INSTR  
 'Maksym is drunk.'
- c. Maksym            buv student /            studentom /    pjanyj /            pjany.  
 Maksym-NOM was student-NOM/ -INSTR/    drunk-NOM/ -INSTR  
 'Maksym was a student/Maksym was drunk.'
- d. Maksym            bude    (?)student /            studentom /  
 Maksym-NOM will-be    (?)student-NOM/ -INSTR/  
 (?)pjanyj /            pjany.  
 (?)drunk-NOM/ -INSTR  
 'Maksym will be a student/will be drunk.'

In section 2 of this chapter I will show that the two participle constructions in Russian under example (1) above differ from each other structurally. I will demonstrate, however, that the instrumental–Case agreement dichotomy in both these constructions is linked to a grammatical aspectual contrast, namely only a predicative participle with instrumental Case marking describes an eventuality that is bounded in time, that is, it holds within the Topic Time. In section 3 of this chapter I will illustrate that the Case-marking patterns in example (2) above are also directly linked to grammatical aspect. That is, the absence of instrumental Case marking in the PRESENT TENSE (examples 2a and 2b), a Case-marking opposition in the past/PAST (example 2c), and the preference for the instrumental Case in the FUTURE (2d)<sup>2</sup> all fall out naturally from an analysis that links Case and aspect in copular constructions in the East Slavic languages.

<sup>1</sup> I am grateful to Elena Filimonova for providing me with this example.

<sup>2</sup> The copula *bud-* has present tense morphology but is interpreted as the FUTURE TENSE.



Ukrainian has two additional copular constructions absent in Belarusian and Russian. These are illustrated in examples (3) and (4).

- (3) Maksym je (?)učytel'/ učytelem.  
Maksym-NOM BE (?)teacher-NOM/ -INSTR  
'Maksym is a teacher.'
- (4) Maksym— ce/to (je/buv/bude) naš drug/ \*našym drugom.  
Maksym that (BE/was/will-be) our friend-NOM/ \*-INSTR  
'Maksym is (was/will be) our friend.'

These two examples show that Ukrainian has (what appears to be) an overt present tense/PRESENT TENSE copula which can take an instrumental Case-marked predicate, and, for some speakers, a nominative Case-marked predicate. This pattern differs significantly from the Case-marking possibilities with the PRESENT TENSE zero copular in the East Slavic languages (examples 2a and 2b above), in which the instrumental Case is ungrammatical.<sup>3</sup> Example (4) shows that Ukrainian also has a pronominal copular construction, in which for many speakers (although not all) a form of the verb BE is also possible. This pronominal construction has a so-called PREDICATIONAL interpretation, that is, the SUBJECT (*Maksym*) is a referential argument (type <e>) and the predicate (*učytel* 'teacher') is a predication complement (type <e, t>) (this terminology is discussed in detail in section 3). As will become clear shortly, one of the consistent patterns in copular constructions in the East Slavic languages is that predication complements can occur in the instrumental Case with a past or future TENSE form of BE.

<sup>3</sup> As is well known, the instrumental Case is possible with what appears to be a zero copular construction in examples like (i) below.

- i. Sergej u nas načal'nikom. (Russian)  
Sergej-NOM at us boss-INST  
'Sergej is the boss here.'  
(Geist 1999: 5)

In this example, however, the instrumental C/case-marked element is interpreted as 'to work as'. I follow Geist (1999), among others, in the claim that the verb *rabotat* 'to work' has been elided in this construction, i.e. example (ii) below illustrates the construction without ellipsis.

- ii. Sergej u nas rabotaet načal'nikom.  
Sergej-NOM at us works boss-INSTR  
'Sergej works as the boss here.'  
(Geist 1999: 6)

This use of the instrumental *C*/case is consistent and predictable and belongs to a different phenomenon. See Geist (2006: 173–4) for further discussion of the instrumental *C*/case with the zero copula in Russian.

Example (4) is therefore of particular interest, given the ungrammaticality of the instrumental Case with *BE* in any tense, despite the fact that the complement constitutes a predicate. Examples like these provide further support for the claim in chapter 4 that analyses which attempt to link all instrumental Case marking on predicates to the presence of a predicate phrase in the syntax are too strong (e.g. for Russian, Bailyn and Rubin 1991, and Bailyn 1995a, 2001). In section 3 of this chapter, I shall suggest that the Case-marking patterns under (3) and (4) in Ukrainian are not linked to aspect. I will demonstrate that the copular-like element *je* in an example like (3) above is a lexical item similar to the lexical verb *javljat'sja* 'to be' in Russian (which obligatorily merges with an instrumental Case-marked argument). This hypothesis is supported by the similar syntactic and semantic behaviour of *javljat'sja* in Russian and *je* in Ukrainian. I will maintain that the pronominal construction under example (4) does constitute a copular construction and that the absence of instrumental Case marking on the predicate in this construction is directly related to the different types of small clause complements that can merge with the copula in Ukrainian versus Belarusian and Russian.

The analysis of copular constructions in this chapter provides further support for Dickey's (2000, 2005) hypothesis that the Slavic languages can be divided into eastern and western groups according to an aspectual parameter, since the contrasts I shall discuss are again unique to the East Slavic languages. The instrumental C/case can be found in copular constructions to varying degrees in other Slavic languages, as will become clear later when I discuss pronominal copular constructions in Polish in section 3. A clear and consistent Case-marking opposition based on aspectual distinctions, however, is unique to the East Slavic languages.

## 2. Participle constructions in Russian

Consider first the examples under (1) (p. 164), repeated under (5) below.

### (5) *Predicative participles in Russian:*

- a. Ja videla Ivana<sub>i</sub> prygajučego<sub>i</sub>/ prygajučim<sub>i</sub> čerez ručej.  
I-NOM saw Ivan-ACC jumping-ACC/ -INSTR across stream  
'I saw the eventuality of Ivan jumping across the stream.'  
'I saw Ivan as he was jumping across the stream.'  
'I saw (the) Ivan who was jumping across the stream.' (accusative Case only)  
'I saw Ivan (who was) jumping across the stream.' (accusative Case only)

- b. Druz'ja            priveli    Ivana<sub>i</sub>       domoj    oruščego<sub>i</sub>/    oruščim<sub>i</sub>  
 Friends-NOM brought Ivan-ACC home yelling-ACC/ -INSTR  
 blatnye       pesni.  
 thieves'       songs  
 'His friends brought Ivan home yelling thieves' songs.'

These constructions resemble the so-called -ING participle in English. The distribution of the -ING participle in English has attracted a significant amount of attention in the generative literature, yet the fact that Russian even has a construction equivalent to a number of uses of the -ING participle in English has been largely ignored.<sup>4</sup> English has at least nine types of -ING participle constructions, listed under (6) below.

(6) *The -ING participle in English:*

- a. I like Ben's reading of Shakespeare. (Nominal gerund)
- b. I saw Ben jumping across the river. (Perceive-ING)
- c. They brought Ben home limping on one leg. (Depictive-ING)
- d. I like Ben's reading Shakespeare. (POSS-ING)
- e. I hate Ben smoking. (ACC-ING)
- f. I like PRO reading Shakespeare. (PRO-ING)
- g. I fell in love with a student reading Shakespeare. (Reduced Relative Clause)
- h. I am reading Shakespeare. (Progressive complement of BE)
- i. Ben started reading Shakespeare. (Progressive complement of PHASE verbs like *start*, *stop*, *keep*)

Russian has a participle construction for the equivalent of four of these nine categories, namely Perceive-ING (6b), Depictive-ING (6c), ACC-ING (6e), and Reduced Relative Clause (6g).<sup>5</sup> The participle construction in example (5a) above, for instance, is ambiguous—it can be interpreted as a Perceive- or Depictive-ING construction or as a reduced relative clause. In the latter interpretation, Case agreement is obligatory on the participle (and in the

<sup>4</sup> Exceptions include Babby's (forthcoming) work and Richardson (2003a).

<sup>5</sup> Examples (6a) and (6d) would be rendered with a *kak* 'how' clause in Russian, e.g.:

- i. Mne       nnavitsja,    kak Ivan       čitaet    Šekspira.  
 I-DAT like       how Ivan-NOM reads    Shakespeare-ACC  
 'I like how Ben reads Shakespeare.'

Example (6f) would be translated with a non-finite complement, e.g.:

- ii. Mne       nnavitsja    čitat'       Šekspira.  
 I-DAT like       to-read    Shakespeare-ACC  
 'I like to read Shakespeare.'

written language a comma is necessary immediately preceding the participle). The participle construction in example (5b) constitutes a Depictive-ING construction. Like example (5a), this example can also have a reduced relative clause interpretation (with Case agreement on the participle only). Example (7) shows that a so-called ACC-ING construction is also possible in Russian for many (although not all) speakers:

(7) ACC-ING:

Ja           nenavižu   Ivana<sub>i</sub>       kurjaščego<sub>i</sub>/   kurjaščim<sub>i</sub>.

I-NOM hate       Ivan-ACC smoking-ACC/   -INSTR

'I hate Ivan smoking.'

'I hate (the) Ivan who is smoking.' (reduced relative clause, accusative Case only)

As with Perceive- and Depictive-ING constructions, this type of construction can also have a reduced relative clause interpretation (with Case agreement on the participle only).

It is important to state from the outset that the judgements regarding the existence of a given predicative participle construction and also the grammaticality of the instrumental Case versus Case agreement on the participle vary considerably across native speakers.<sup>6</sup> A type of reduced relative clause interpretation of a participle with Case agreement was reasonably uncontroversial. In general, Perceive-ING constructions were then the most widely accepted, both in terms of their structure and the grammaticality of either the instrumental Case or Case agreement on the participle. Some speakers said they would prefer a *kak* construction for the reading 'I saw the eventuality of Ivan jumping across the stream', that is, they would prefer a construction like (8) below.

(8) Ja           videla, kak   Ivan           prygal       čerez   ručej.

I-NOM saw       how   Ivan-NOM jumped across stream

'I saw how Ivan jumped across the stream.'

The participle in example (6h) would be translated with an imperfective verb in the present tense, as in (iii), and the participle in (6i) would be translated with a non-finite imperfective verb, as in (iv).

iii. Ja           čitaju                   Šekspira.

I-NOM read-1ST SG-IMPF Shakespeare-ACC

'I am reading Shakespeare.'

iv. Ivan       načal                   čitat'                   Šekspira.

Ivan began                   to-read               Shakespeare

'Ivan began to read Shakespeare.'

<sup>6</sup> I tested predicative participle constructions on 31 native speakers in Russia, five native speakers in the United States, and 13 native speakers in England.

However, almost all speakers claimed that the participle construction was still possible for them. That this participle construction would be the most widely accepted after the reduced relative clause interpretation of a participle (with Case agreement) should not strike us as surprising, given Noonan's (1985: 62) observation that the only place in complement systems cross-linguistically where participles are regularly found is in complements to immediate perception verbs. The majority of speakers accepted the existence of a Depictive-ING participle construction like (5b) (p. 168). Some speakers, however, found an ACC-ING construction like (7) (p. 169) awkward or unnatural. For those who accepted it, many (although not all) preferred Case agreement on the participle. Finally, some speakers preferred a participle with Case agreement to precede the NP in some constructions. In what follows, I will discuss the structure and interpretation of participle constructions for different groups of speakers. I will illustrate that the participle construction in example (5b) differs from those in examples (5a) and (7) structurally, but that the Case-marking patterns in all three examples are directly related to grammatical aspectual contrasts.<sup>7</sup>

Russian participles differ from their English -ING equivalents in that they exhibit number, gender, C/case, tense, and aspect morphology. Table 5.1

TABLE 5.1. Participles in Russian

|                             | Imperfective | Perfective  |
|-----------------------------|--------------|-------------|
| Non-past Active Participle  | platjaščij   |             |
| Non-past Passive Participle | platimyj     |             |
| Past Active Participle      | plativšij    | zaplativšij |
| Past Passive Participle     |              | zaplačennyj |

<sup>7</sup> There are also substandard indeclinable gerundive (i.e. verbal adverb) paraphrases of some of these participle constructions in Russian, as examples (i) and (ii) below illustrate. These examples are substandard, since in contemporary standard Russian the gerund refers to the external argument of the primary predicate in the matrix clause, whereas the gerund in these examples refers to the accusative case-marked internal argument.

- i. Ja        videla        ee<sub>i</sub>        igraja<sub>i</sub>        Sonju        v        p'ese  
I-NOM    saw        her-ACC    playing-GERUND    Sonja-ACC    in        play  
'Djadja Vanja'.  
Djadja Vanja  
'I saw her playing Sonja in the play "Djadja Vanja".'
- ii. Ja        vspominaju    tebja<sub>i</sub>        sidja<sub>i</sub>        u        okna.  
I-NOM    remember    you-ACC    sitting-GERUND    at        window  
'I remember you sitting at the window.'

For further discussion of these substandard gerunds, and gerunds in general in Russian, see Rappaport (1984).

illustrates the different past and non-past tense forms of a nominative masculine singular participle derived from the verb *platit'*/*zaplatit'* 'to pay'. In this chapter, I focus on the distribution and Case marking of active participles in Russian, since only these constitute a hybrid between a verb and an adjective that enables an interpretation equivalent to the -ING reading of some English participle constructions.<sup>8</sup> The following sections address the structure of each of the participle constructions illustrated under examples (5a), (5b), and (7) in turn.

## 2.1 *Perceive-ING constructions*

As noted above, I refer to English participle constructions with verbs of perception like 'I saw Ben jumping across the stream' as Perceive-ING constructions. There is a great deal of variation in the structures that have been posited for these Perceive-ING constructions in English. They have been analysed as object control structures (Fiengo 1974; Iwakura 1984), full clause constituents (Barss 1985; Johnson 1988; van der Leek and Jong 1982), verb phrases or verbal small clauses (Akmajian et al. 1979; Roeper and de Villiers 1992), noun phrases (Akmajian 1977), or as adjunction structures with participles that do not form a constituent with their antecedents, that is, depictives (Bowers 1981). The degree of variation in the hypotheses surrounding the structure of these constructions is not surprising given that Perceive-ING constructions are structurally ambiguous in English. Declerck (1982a, 1982b), for instance, shows that there are at least three different complement types in

<sup>8</sup> Babby (forthcoming) claims that passive participles are more like an adjective than a hybrid between a verb and an adjective, hence their absence in -ING constructions. He shows, for instance, that only passive participles, like regular adjectives, have a short form and can occur with the copula. In other words, they exhibit some of the distributional and syntactic properties of regular adjectives. These patterns are illustrated under examples (i)–(iii) below (PPP stands for past passive participle and PRAP for present active participle).

- |      |                  |     |                                                        |                            |        |         |
|------|------------------|-----|--------------------------------------------------------|----------------------------|--------|---------|
| i.   | On <sub>i</sub>  | byl | pojman <sub>i</sub> /                                  | pojmannym <sub>i</sub>     |        |         |
|      | he-NOM           | was | captured-PPP.short/                                    | captured-PPP.long.INSTR    |        |         |
|      |                  |     | 'He was captured.'                                     |                            |        |         |
| ii.  | On               | byl | p'jan/                                                 | p'janym.                   |        |         |
|      | he-NOM           | was | drunk-ADJ.short/                                       | drunk-ADJ.long.INSTR       |        |         |
| iii. | *On <sub>i</sub> | byl | perexodjašč <sub>i</sub> /                             | perexodjaščim <sub>i</sub> | čerez  | sulicu. |
|      | he-NOM           | was | walking-PRAP.short/                                    | walking-PRAP.INSTR         | across | street  |
|      |                  |     | (intended reading) 'He was walking across the street.' |                            |        |         |

Example (i) shows that the passive participle, like the adjective in (ii), has a short form variant and can occur with the copula, whereas example (iii) illustrates that the active participle (i.e. the hybrid participle) has no short form and cannot occur with the copula. See Babby's (forthcoming) work for further discussion.

English Perceive-ING constructions. These three types are listed under example (9) below.

- (9) I saw the moon rising over the mountain.  
 a. I saw the moon which was rising over the mountain.  
 b. I saw the moon as it was rising over the mountain.  
 c. I saw (the eventuality of) the moon's rising over the mountain.

The three different readings shown in (9a)–(c) illustrate that the participle in Perceive-ING constructions in English can be interpreted as a reduced relative clause (9a), a type of adjunct (9b), or as a clausal complement (9c).

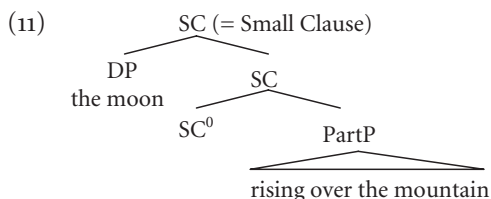
As already mentioned (see p. 167), Perceive-ING constructions are also ambiguous in Russian. Consider example (5a), repeated below as (10).

- (10) Ja videla Ivana<sub>i</sub> prygažuščego<sub>i</sub>/ prygažuščim<sub>i</sub> čerez ručej.  
 I-NOM saw Ivan-ACC jumping-ACC/ -INSTR across stream  
 a. 'I saw the eventuality of Ivan jumping across the stream.' [clausal interpretation]  
 b. 'I saw Ivan as he was jumping across the stream.' [adjunct]  
 c. 'I saw (the) Ivan who was jumping across the stream.' (accusative Case only) [reduced relative clause]  
 d. 'I saw Ivan (who was) jumping across the stream.' (accusative Case only) [reduced relative NP attribute/modifier]

As in English, notice that the participle and its antecedent can function as a clausal complement (10a), the participle can constitute an adjunct (i.e. a type of depictive) (10b), or (with Case agreement) the participle can have a type of reduced relative clause interpretation (10c) or reduced relative NP attribute/modifier interpretation, similar to the reduced relative clause interpretation (10d) (this latter interpretation will be clarified shortly). In this section I focus on the clausal, reduced relative clause, and reduced relative NP modifier/attribute interpretations of perceive-ING constructions. I address so-called depictive-ING constructions in detail in the following section.

Consider first the clausal interpretation of the participle in Perceive-ING constructions. Since participles in English have no overt morphological tense marking, and are generally believed to belong to the class of non-finite verb forms, the clausal interpretation of the participle in Perceive-ING constructions is often assumed to arise when the participle and its antecedent form a small clause in English along the lines of the structure in (11) below:<sup>9</sup>

<sup>9</sup> The pleonastic elements 'it' and 'there' are grammatical in Perceive-ING complements in English; elements that are only licensed in 'external argument-like' positions, e.g:



Unlike the situation in English, however, in Russian there is no reason to believe that the clausal interpretation of participles in Perceive-ING constructions should be captured syntactically with a small clause structure, since the participle in Russian has overt tense morphology. That is, one of the very defining characteristics of a small clause is the absence of tense morphology. The participle in example (10) above in Russian is a present active participle. Notice, however, that a past active participle can also be merged in Perceive-ING constructions, as the following example illustrates:

- (12) Ja            videla    Ivana        prygavšego/                    prygavšim  
       I-NOM   saw        Ivan-ACC   jumping-IMPF-PAST-ACC/   -INSTR  
       čerez    ručej.  
       across   stream

The ability for a participle to exhibit both present and past tense morphology in Perceive-ING constructions suggests that the participle and its antecedent should be represented as a full clause complement of the verb (i.e. a TP), not a small clause.

If the participle and its antecedent can be interpreted as a clausal complement in Perceive-ING constructions in Russian, we would expect them to behave as a syntactic constituent. The following examples illustrate that this expectation is borne out. Example (13) demonstrates that the two can be replaced by the pronoun *eto* 'this' and example (14) shows that they can also be replaced by the pronoun *čto* 'what' in a (colloquial) pseudo-cleft construction.<sup>10</sup>

- i. We saw it raining.
- ii. We saw there rising over the meadow a blue haze.  
 (Felser 1999: 72)

Patterns like these provide further support for the hypothesis that the participle is merged within a small clause complement in English.

<sup>10</sup> Neither of these diagnostics represents completely natural Russian. They nevertheless give us an important insight into the structure of these participle constructions.



- (13) Ja videla [Ivana prygajuščego/ prygajuščim čerez  
 I-NOM saw Ivan-ACC jumping-ACC/ -INSTR across  
 ručej]<sub>i</sub>, i Katia èto<sub>i</sub> tože videla.  
 stream and Katia this also saw.  
 'I saw Ivan jumping across the stream and Katia saw it too.'
- (14) Čto<sub>i</sub> ja videla– (tak èto) [Ivana prygajuščego/  
 what-ACC I-NOM saw (so this) Ivan-ACC jumping-ACC/  
 prygajuščim čerez ručej]<sub>i</sub>  
 -INSTR across stream  
 'What I saw was Ivan jumping across the stream.'

In these two examples, *èto* 'this' and *čto* 'what' can refer to the entire string [Ivana *prygajuščego/prygajuščim čerez ručej*]; thus they demonstrate that the participle and its antecedent function syntactically as a unit (a constituent).

The tests under (13) and (14) do not, however, unambiguously rule out the possibility that the participle is merged within the NP as a type of (reduced relative) attribute/clause roughly equivalent to a *kotoryj* construction, that is, equivalent to a construction like (15) below (the reduced relative attribute or clause interpretation would only be possible with Case agreement on the participle).

- (15) Ja videla Ivana, kotoryj prygaet/ prygal  
 I-NOM saw Ivan-ACC who jump-NON-PAST/ jumped-PAST  
 čerez ručej.  
 across stream  
 'I saw Ivan, who is/was jumping across the stream.'  
 'I saw the Ivan, who is/was jumping across the stream.'

We do, however, have two additional tests we can apply to determine whether the participle and its antecedent constitute a clausal complement or whether the participle is merged within the NP, namely *wh*-movement and *kogo* 'who' pseudo-cleft diagnostics. Consider first the role *wh*-movement can play in determining the syntactic status of the predicative participle. As illustrated in Bailyn 1995a, specifiers and left-branch modifiers can undergo *wh*-movement out of an NP in Russian, but right-branch modifiers and NP complements cannot. Furthermore, *wh*-movement is ungrammatical out of a tensed relative clause in Russian. These patterns are illustrated under examples (16)–(18) below.

- (16) *Wh-movement out of a specifier:*  
 Kakuju<sub>i</sub> Ivan čital [t<sub>i</sub> knigu]<sub>NP</sub>?  
 Which-ACC Ivan-NOM read book-ACC  
 'Which book did Ivan read?'  
 (Bailyn 1995a: 244)

(17) *Wh-movement out of a right-branch modifier/complement:*

- \*S čem<sub>i</sub> Boris znaet [studenta t<sub>i</sub>]? (Otv<sub>et</sub>: S  
 with what Boris-NOM knows student-ACC? (Answer: With  
 dlinnymi volosami)  
 long hair)  
 (Bailyn 1995a: 244–246)

(18) *Wh-movement out of a tensed relative clause:*

- \*Kogo<sub>i</sub> ty pozvonil agentu, kotoryj ljubit t<sub>i</sub>.  
 who-ACC you-NOM phoned agent-DAT who-NOM loves  
 (Bailyn 1995a: 235)

If the predicative participles in a Perceive-ING construction like (10) above constitute right-branch modifiers/complements or tensed reduced relative attributes or clauses (roughly equivalent to a tensed *kotoryj* clause) merged within the NP, then *wh*-movement out of the predicative participle should be ungrammatical, given the patterns illustrated under (16)–(18) above. All the native speakers I consulted accepted *wh*-movement out of a predicative participle with instrumental Case marking in perceive-ING constructions, that is, for them, examples like (19) and (20) below were grammatical.

- (19) [Čerez čto]<sub>i</sub> ty videla Ivana prygajučim t<sub>i</sub>?  
 across what you-NOM saw Ivan-ACC jumping-INSTR  
 (Otv<sub>et</sub>: Čerez ručej.)  
 (Answer: Across stream.)  
 ‘What did you see Ivan jumping across? (Answer: The stream).’
- (20) Komu<sub>i</sub> ty videla Ivana ulybajuščimsja t<sub>i</sub>?  
 Who-DAT you-NOM saw Ivan-ACC smiling-INSTR  
 (Otv<sub>et</sub>: Ire.)  
 (Answer: Ira-DAT.)  
 ‘Who did you see Ivan smiling at? (Answer: Ira).’

The grammaticality of *wh*-movement out of a predicative participle construction with instrumental Case marking strongly suggests that this participle is not merged within the NP (I discuss *wh*-movement out of a participle with Case agreement shortly).

Consider now our second diagnostic, namely the *kogo* ‘who’ pseudo-cleft test. If the participle is merged as an NP modifier/attribute, we would expect to be able to substitute both the participle and its antecedent with the pronoun *kogo* ‘who’ in a (colloquial) pseudo-cleft construction like *kogo<sub>i</sub> ja videla—(tak èto)X<sub>i</sub>* ‘who<sub>i</sub> I saw is X<sub>i</sub>’. The following example illustrates that

speakers did not accept coreference of a participle and its antecedent with *kogo* 'who' when the participle had instrumental Case marking:

- (21) \*Kogo<sub>i</sub> ja videla– (tak èto) [Ivana prygajuščim  
 who-ACC I-NOM saw (so this) Ivan-ACC jumping-INSTR  
 čerez ručej]<sub>i</sub>.  
 across stream

These two diagnostics combined strongly suggest that an instrumental Case-marked participle in Perceive-ING constructions is not merged within the NP, that is, it functions as a clausal constituent with its antecedent, not an NP modifier/attribute.

The status of the participle with Case agreement in Perceive-ING constructions is less straightforward. Some speakers found *wh*-movement out of the predicative participle with Case agreement grammatical, whereas others did not. That is, not all speakers accepted constructions like the following:<sup>11</sup>

- (22) [Čerez čto]<sub>i</sub> ty videla Ivana prygajuščego t<sub>i</sub>?  
 across what you-NOM saw Ivan-ACC jumping-ACC  
 (Otvèt: Čerez ručej.)  
 (Answer: Across stream.)  
 'What did you see Ivan jumping across? (Answer: The stream).'

- (23) Komu<sub>i</sub> ty videla Ivana ulybajuščegosja t<sub>i</sub>?  
 Who-DAT you-NOM saw Ivan-ACC smiling-INSTR  
 (Otvèt: Ire.)  
 (Answer: Ira-DAT.)  
 'Who did you see Ivan smiling at? (Answer: Ira).'

Furthermore, those speakers who did not accept *wh*-movement out of a predicative participle with Case agreement claimed that the pronoun *kogo* 'who' referred to the entire string [*Ivana prygajuščego čerez ručej*] in a pseudo-cleft construction, that is, a construction like (24) below was grammatical for them.

<sup>11</sup> Those speakers who preferred the participle with Case agreement to precede an NP in Perceive-ING constructions also did not accept *wh*-movement out of the PartP with Case agreement. I assume this is due to the status of the participle as a type of tensed reduced relative for these speakers, regardless of its location preceding or following the NP, i.e. for these speakers the participle exhibits the same constraints as tensed relative (*kotoryj*) clauses.

- (24) Kogo<sub>i</sub> ja videla— (tak èto) [Ivana prygajuščego  
 who-ACC I-NOM saw (so this) Ivan-ACC jumping-ACC  
 čerez ručej]<sub>i</sub>.  
 across stream  
 'Who I saw was Ivan jumping across the stream.'

Those speakers who accepted *wh*-movement out of a predicative participle with Case agreement, on the contrary, claimed that the pronoun *kogo* could refer to both the participle and its antecedent, on a particular interpretation, but it did not have to. That is, coreference for them of the string [*Ivana prygajuščego čerez ručej*] with *kogo* in an example like (24) above was not obligatory (although it was possible). The different grammaticality judgements of *wh*-movement and pseudo-cleft constructions when a participle has Case agreement suggest that, for some speakers, a participle with Case agreement can be structurally equivalent to one with instrumental Case marking (i.e. it can function as a clausal complement with its antecedent), whereas for others a participle with Case agreement constitutes a type of right-branch modifier which is essentially equivalent to a (tensed) reduced relative NP attribute or it is equivalent to a type of (tensed) reduced relative clause merged within the NP.<sup>12</sup> That is, one group of speakers has the structures illustrated under (25) in Perceive-ING constructions, whereas the other has the structures under (26):

(25) *Group A:*

- a. Ja videla [Ivana prygajuščego/ prygajuščim  
 I-NOM saw Ivan-ACC jumping-ACC/ -INSTR  
 čerez ručej]<sub>TP</sub>  
 across stream  
 'I saw Ivan jumping across the stream.'
- b. Ja videla [Ivana prygajuščego čerez ručej]<sub>NP</sub>  
 I-NOM saw Ivan-ACC jumping-ACC across stream  
 'I saw Ivan jumping across the stream.'

(26) *Group B:*

- a. Ja videla [Ivana prygajuščim čerez ručej]<sub>TP</sub>  
 I-NOM saw Ivan-ACC jumping-INSTR across stream  
 'I saw Ivan jumping across the stream.'

<sup>12</sup> In the reduced relative attribute interpretation no comma is necessary for these speakers in the written language before the participle. In the reduced relative clause interpretation a comma is necessary. Some speakers prefer the participle to precede the NP in the reduced relative attribute interpretation. This construction can be rendered roughly into English as 'the jumping across the stream Ivan'.

- b. Ja videla [Ivana prugajušćego čerez ručej]<sub>NP</sub>  
 I-NOM saw Ivan-ACC jumping-ACC across stream  
 'I saw Ivan jumping across the stream.'

In what follows I will suggest that the Case agreement–instrumental Case-marking dichotomy for both these groups of speakers is linked to a grammatical aspectual contrast, regardless of whether they belong to group A or B.

Consider now the interpretation of the participles with different Case marking in example (10) above, repeated below under (27).

- (27) Ja videla Ivana<sub>i</sub> prugajušćego<sub>i</sub>/ prugajuščim<sub>i</sub> čerez  
 I-NOM saw Ivan-ACC jumping-ACC/ -INSTR across  
 ručej.  
 stream  
 'I saw the eventuality of Ivan jumping across the stream.'  
 'I saw Ivan as he was jumping across the stream.'  
 'I saw (the) Ivan who was jumping across the stream.' (accusative  
 Case only)  
 'I saw Ivan (who was) jumping across the stream.' (accusative Case only)

In general, speakers claimed that the instrumental Case-marked participle in this example focused on what Ivan was doing at a particular point in time, whereas the participle with Case agreement did not. Some speakers also claimed that the instrumental Case-marked participle indicates that the eventuality is further in the past, over, or Ivan is now on the other side of the river, whereas the participle with Case agreement implied that the jumping eventuality was not yet over: Ivan might still be jumping, or the speaker only saw him in mid-air and does not know whether he completed the jump or not. All of these interpretations fall out naturally from grammatical aspectual facts. That is, only the instrumental Case-marked participle describes an eventuality that holds during the Topic Time, that is, it is bounded.

If an instrumental Case-marked participle is bounded in time, we would expect that participle to be excluded with a verb of perception in the PRESENT TENSE, since, as mentioned in chapter 4, Smith (1991/1997: 151–2) maintains that it is pragmatically infelicitous to refer to an eventuality in the PRESENT TENSE with a viewpoint that includes its initial and final points; the viewpoint must exclude an endpoint. It should therefore be pragmatically infelicitous to use a participle with instrumental Case marking with a verb of perception like *videt'* 'see' in the present tense, since this would imply that one sees an entire eventuality, including its endpoint. A participle with Case agreement, on the contrary, should be fine, since a participle with Case agreement does not imply that the

eventuality described by the participle is bounded in time. The following example illustrates that this prediction is borne out.<sup>13</sup>

- (28) Ja vižu Ivana<sub>i</sub> prygajuščego<sub>i</sub>/ \*/?prygajuščim<sub>i</sub>  
 I see Ivan-ACC jumping-NON-PAST-ACC/ \*/?-INSTR  
 čerez ručej.  
 across stream  
 'I see Ivan jumping across the stream.'

The different grammaticality judgements of a construction like this strongly support the hypothesis that an instrumental Case-marked participle indicates that the eventuality described by the participle is bounded in time for all native speakers (regardless of the syntactic location of a participle with Case agreement).

If only the participle with instrumental Case marking describes an eventuality that is bounded in time, we would also expect only this participle to be grammatical when the eventuality it describes is explicitly bounded in time. This prediction is also borne out, as the following example illustrates.

- (29) Ja videla Ivana<sub>i</sub> prygavšim<sub>i</sub>/  
 I-NOM saw Ivan-ACC jumping-IMPV-PAST-INSTR/  
 ??/\*prygavšego<sub>i</sub> čerez ručej 10 minut.  
 ??/\*-ACC across stream 10 minutes  
 'I saw Ivan jump across the stream for ten minutes.'

The judgements of this construction specifically refer to the acceptability of these participles when the adverbial time expression has scope over the jumping eventuality, not over the seeing eventuality denoted by the primary predicate. Furthermore, Case agreement is possible on the participle in this example when the participle has a reduced relative clause interpretation equivalent to a type of *kotoryj* clause, such as 'I saw Ivan, who jumped across the stream for ten minutes' versus 'I saw [Ivan jump across the stream for ten minutes]'. When the clausal interpretation of the jumping eventuality in this example is explicitly bounded in time with the 'for X time' adverbial *10 minut* 'for ten minutes', as expected, the instrumental Case is strongly preferred on the predicative participle in this example for those speakers who accept both Case agreement and instrumental Case marking on the participle in the

<sup>13</sup> Five speakers out of 25 claimed that the instrumental Case marking on the participle in this construction was not completely ungrammatical. I assume that this is because we are dealing with a pragmatic constraint which predicts that this construction will be infelicitous, but not necessarily completely ungrammatical. The overwhelming majority of speakers found a participle with instrumental Case marking ungrammatical or marginal in this construction, as expected.

clausal interpretation of Perceive-ING constructions. This pattern falls out naturally from the generalization that only an instrumental Case-marked participle denotes that the eventuality is bounded in time. Again, examples like these strongly support the hypothesis that the instrumental Case on the participle in Perceive-ING constructions manifests a grammatical aspectual contrast.

It is clear that the instrumental Case on a predicative participle can indicate that the eventuality described by a participle is bounded in time without necessarily eliminating the participle's durative interpretation. That is, the instrumental Case can occur on an imperfective participle, which in turn can still have a durative interpretation for some speakers. In this respect, the use of the instrumental Case as a grammatical aspectual marker strongly resembles the use of a verbal prefix like *po-* in Russian. This prefix can perfectivize a verb that denotes an atelic activity resulting in the interpretation that the activity has internal duration and no inherent endpoint, but it is bounded in time, as the English rendering of example (31) below illustrates.

- (30) My    potancevali.  
       we    danced-PF  
       'We danced for a while.'

In a similar manner, the instrumental Case on an imperfective participle like *prygajuščim* 'jumping' can result in the interpretation that the jumping eventuality has internal duration, but is bounded in time.

As a sidenote, a participle can occur in the perfective aspect with verbs of perception, in which case it is no longer equivalent to a type of -ING construction. That is, a construction like (31) below is possible in Russian, but would be interpreted as 'I saw Ivan smile', not \*'I saw Ivan smiling'.

- (31) Ja            videla    Ivana            ulybnuvsimsja.  
       I-NOM    saw        Ivan-ACC    smile-PF.PAST.INSTR  
       'I saw Ivan smile.'

The participle in the perfective aspect in this example lacks any durative interpretation. Non-finite verbal complements of verbs of perception such as 'drown' in example (33) in English also no longer have a durative interpretation, e.g. (examples taken from Felser 1999):

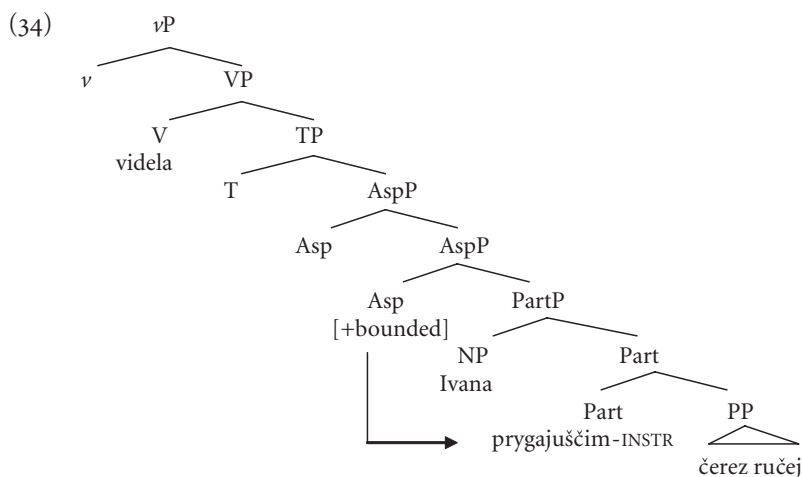
- (32) I saw him drowning, but I didn't save him.  
       (33) \*I saw him drown, but I didn't save him.

Notice that only the -ING participle has duration and is not completive in English and can therefore be interrupted by another eventuality. These

examples, like the Russian examples with different grammatical aspectual marking, differ from each other aspectually.<sup>14</sup>

The pattern that should be clear at this stage is that the instrumental–Case-agreement opposition in Perceive-ING constructions conveys exactly the same aspectual nuances as the Case-marking opposition in depictive secondary predicate constructions discussed in chapter 4, that is, an instrumental Case-marked predicate is bounded, whereas one with Case agreement is not. Furthermore, the link between grammatical aspect and instrumental Case marking holds, regardless of whether a participle with Case agreement is merged within the clausal complement or within an NP.

As illustrated here, instrumental Case-marked participles in Perceive-ING constructions never merge within an NP. The following structure illustrates the configuration I assume for instrumental Case-marked participles interpreted as a clausal complement with their antecedents.



As is clear from this structure, the participle and its antecedent are merged as a clausal complement of V, that is, they are dominated by a TP. As with instrumental Case-marked adjectives in depictive secondary constructions, I assume that the instrumental Case marking on the participle in Perceive-ING constructions is the morphological manifestation of a [+bounded] Asp. Examples (19) and (20) above illustrated that *wh*-movement was possible out of a PartP with instrumental case marking for all native speakers. I assume that the additional

<sup>14</sup> Both Case agreement and instrumental Case marking are possible on a perfective participle in Russian. A participle with Case agreement either has a reduced relative clause interpretation ('I saw Ivan who smiled') or a type of *konstatacija fakta* 'general factual' interpretation, reminiscent of one of the uses of the imperfective aspect in Russian, as discussed in chapter 2.



AspP in the clausal complement of verbs of perception, like the AspP in instrumental Case-marked depictive secondary predicate constructions, provides an escape hatch for *wh*-movement. That is, as in depictive constructions, AspP behaves like  $\nu$ P: it provides an escape hatch for *wh*-movement and it is directly related to the valuing of Case in the syntax.<sup>15</sup>

For some speakers, the configuration under (35) also exists for participles with Case agreement (although the feature in the lower Asp would, of course, then be [–bounded]). For these speakers, I assume that Case agreement occurs via the feature-sharing version of Agree discussed in chapters 3 and 4, and repeated below under (35), that is, there is no morphological manifestation of a [–bounded] feature in predicative participle constructions, just as there was no morphological manifestation of this feature in Belarusian and Ukrainian depictive constructions. Instead, the participle is dependent on its antecedent for Case.

(35) *Agree (Feature-sharing version)* (Pesetsky and Torrego 2004: 4)

- (i) An unvalued feature  $F$  (a *probe*) on a head  $H$  at a syntactic location  $\alpha(F_\alpha)$  scans its c-command domain for another instance of  $F$  (a *goal*) at location  $\beta(F_\beta)$  with which to agree.
- (ii) Replace  $F_\alpha$  with  $F_\beta$ , so that the same feature is present in both locations.

While the participle is dependent on its antecedent for Case, its antecedent in turn is dependent on the verb in the matrix clause for its accusative Case. We have no reason to believe that the Case on the internal argument merged within a PartP should be valued by the TP dominating the participle phrase, since  $T$  lacks person features in participle constructions and is therefore phi-incomplete (i.e. defective). That is, I follow the popular convention that a phi-incomplete  $T$  cannot value the nominative Case, hence the lack of nominative Case marking on the antecedent.<sup>16</sup> There is also no evidence for a link between the Case marking on an internal argument and grammatical aspect in Russian; thus, I assume that the accusative Case on the argument is not valued by an Asp. The next closest functional category that would value the accusative Case is therefore  $\nu$ .

For other speakers, a participle with Case agreement is merged within NP as a type of (tensed) reduced relative attribute (right-branch modifier) or

<sup>15</sup> Matushansky (2000) posits a similar hypothesis for copular constructions in Russian. I discuss her analysis in section 3.2.

<sup>16</sup> Furthermore, Richardson's (2003a) hypothesis that the dative case is the default case on an external argument when  $T$  is absent or defective would not predict dative case marking on the DP in the participle phrase, since this analysis links default case to specific structural locations; in the case of the dative, the spec,  $\nu$ P position.

clause. I assume that there is no (non-verbal) AspP in the participle construction merged within the NP, hence the ungrammaticality of *wh*-movement with these constructions and the default unbounded interpretation of the participle that can arise. Case agreement on these participles also occurs via (the feature-sharing version of) Agree above, that is, like determiners and adjectival modifiers in general, participles with Case agreement are directly dependent on the accusative Case-marked antecedent for their Case.

There is an additional interpretation of Perceive-ING constructions I have not addressed in this section: the interpretation listed under (9b) above for the English construction ‘I saw the moon rising over the mountain’, namely ‘I saw the moon as it was rising over the mountain’. In this interpretation the participle does not function as a constituent with its antecedent (Bowers 1981), it constitutes a type of depictive predicate adjoined to the verb phrase. The following section addresses the structure and Case-marking patterns of so-called Depictive-ING constructions.

## 2.2 *The depictive participle (Depictive-ING)*

Recall example (1b) from the beginning of this chapter, repeated above as (5b) and below as (36).

- (36) Druz’ja            priveli    Ivana<sub>i</sub>    domoj    oruščego<sub>i</sub>/    oruščim<sub>i</sub>  
 Friends-NOM brought Ivan-ACC home yelling-ACC/ -INSTR  
 blatnye    pesni.  
 thieves’ songs  
 ‘His friends brought Ivan home yelling thieves’ songs.’

In this section I will show that the participle in a construction like this constitutes a depictive secondary predicate, that is, it behaves in the same manner as the adjectival secondary predicates discussed in chapter 4.<sup>17</sup> In what follows, I will focus only on the behaviour of depictive PartPs with internal argument antecedents, since native speakers strongly prefer the use of the indeclinable gerund (verbal adverb) when the antecedent constitutes an external argument. For instance, speakers consistently replaced the participles in examples (37) and (38) below with a gerund, as shown in (39), irrespective of the location of the participial phrase:

<sup>17</sup> A small number of speakers only accepted instrumental Case marking on the participle in Depictive-ING constructions. These same speakers also only accepted instrumental Case marking in depictive adjectival constructions. This did not mean that instrumental Case marking was obligatory for these speakers in all the participle constructions under analysis. For instance, all of these speakers accepted Case agreement in Perceive-ING constructions, at least in the NP modifier/attribute interpretation. Some of them also accepted participles with Case agreement in the ACC-ING constructions in the following section.

- (37) ?Ja<sub>i</sub> čitala pis'mo ležaščaja<sub>i</sub>/ ležašče<sub>i</sub> na divane.  
 I-NOM read letter lying-NOM/ -INSTR on sofa  
 (Intended reading) 'I read the letter (while I was) lying on the sofa.'
- (38) ?Ležaščaja<sub>i</sub>/ Ležašče<sub>i</sub> na divane, ja<sub>i</sub> čitala pis'mo.  
 lying-NOM/ -INSTR on sofa I-NOM read letter  
 (Intended reading) 'Lying on the sofa, I read the letter.'
- (39) Leža<sub>i</sub> na divane, ja<sub>i</sub> čitala pis'mo.  
 lying-GERUND on sofa I read letter  
 'Lying on the sofa, I read the letter.'

Example (40) represents one of the few predicative participle examples that speakers did accept with an external argument antecedent.<sup>18</sup>

- (40) On<sub>i</sub> vernulsja ot vrača ele stojaščij<sub>i</sub>/   
 he-NOM returned from doctor hardly standing-NOM/   
 stojaščim<sub>i</sub> na nogax.   
 -INSTR on feet   
 'He returned from the doctor barely standing.'

The patterns I discuss below also hold for the rare examples of depictive participles with external argument antecedents. I do not focus on these constructions, however, given the overall restriction on their general occurrence.

As mentioned in the previous section, in Depictive-ING constructions, unlike Perceive-ING constructions, the participle and its antecedent do not form a constituent. This claim is supported by the following constituent structure tests:

- (41) *Èto/Ego constituent structure test:*  
 \*Včera milicija privela Ivana<sub>i</sub> domoj oruščego<sub>i</sub>/   
 yesterday police-NOM brought Ivan-ACC home yelling-ACC/   
 oruščim<sub>i</sub> blatnye pesni, a segodnja druž'ja   
 -INSTR thieves' songs but today friends-NOM   
 èto<sub>i</sub>/ ego<sub>i</sub> priveli domoj.   
 this-ACC/ him-ACC brought home
- (42) *Čto pseudo-cleft constituent structure test:*  
 \*Čto<sub>i</sub> milicija privela domoj– (tak èto) [Ivana   
 what-ACC police-NOM brought home (so this) Ivan-ACC   
 oruščego/ oruščim blatnye pesni]<sub>i</sub>.   
 yelling-ACC/ -INSTR thieves' songs

<sup>18</sup> I thank Valentina Cherepuxina for drawing my attention to this construction.

(43) *Kogo constituent structure test*:<sup>19</sup>

- \*Kogo<sub>i</sub>            milicija            privela    domoj–(tak èto) [Ivana  
 who-ACC    police-NOM    brought    home    (so this)    Ivan-ACC  
 oruščego/        oruščim    blatnye    pesni]<sub>i</sub>.  
 yelling-ACC/    -INSTR    thieves'    songs

These constituent structure tests show that the pronouns *èto/ego* 'this/him', *čto* 'what', and *kogo* 'who' do not refer to the string [*Ivana oruščego/oruščim blatnye pesni*] in a Depictive-ING construction like example (36) (p. 183): the NP *Ivana* 'Ivan' and the participles *oruščego/oruščim* 'yelling' merge as separate constituents in the syntax.

Recall from chapter 4 that depictive adjectival predicates also do not form a constituent with their antecedents, as examples like (44) and (45) illustrate:

- (44) \*Čto<sub>i</sub>            ona            s'jela–    (tak èto) [mjaso        syrym]<sub>i</sub>.  
 what-ACC    she-NOM    ate        (so this)    meat-ACC    raw-INSTR
- (45) \*Kogo<sub>i</sub>            druž'ja            priveli    domoj–    (tak èto) [Ivana  
 who-ACC    friends-NOM    brought    home    (so this)    Ivan  
 p'janogo/        p' jany]<sub>i</sub>.  
 drunk-ACC/    -INSTR

These examples demonstrate that the predicative participles in example (36) (p. 183) behave in a parallel manner to depictive adjectival predicates, that is, neither the predicative participle nor the predicative adjective form a constituent with their antecedent—they are adjuncts.

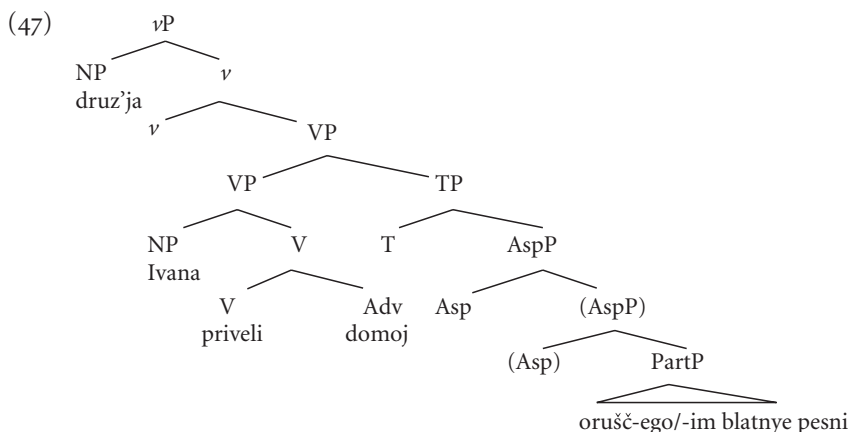
VP-ellipsis patterns suggest that, like depictive adjectives, depictive participles adjoin within the verb phrase in Russian, as example (46) shows.

- (46) Včera        druž'ja            [priveli    Ivana        domoj    oruščego/  
 yesterday    friends-NOM    brought    Ivan-ACC    home    yelling-ACC/  
 oruščim    blatnye    pesni]<sub>VP-i</sub>    a    segodnja    milicija [...]<sub>VP-i</sub>.  
 -INSTR    thieves'    songs        but    today    police  
 'Yesterday his friends brought Ivan home yelling thieves' songs, but  
 today the police did.'

This example illustrates that the participle and its antecedent can be elided with the entire verb phrase, which in turn demonstrates that the participle is merged within the verb phrase. The following configuration illustrates the

<sup>19</sup> As with depictive adjectival constructions, coreference with the pronoun *kogo* 'who' is possible for some speakers if the participle with Case agreement has a modifier/attribute interpretation. Crucially, however, coreference is not obligatory, i.e. it is not possible on the depictive reading.

structure I assume for Depictive-ING constructions in Russian (I discuss the status of the lower AspP shortly):



As in depictive adjectival constructions, the depictive participle in this configuration is adjoined to a level where it is in a c-command relationship with its antecedent. That is, the first branching node that counts for c-command in this configuration is the highest VP, following the popular convention that adjunction does not count for c-command relations. The antecedent *Ivana* ‘Ivan’ therefore is able to c-command the participle—which constitutes the entire TP—in this configuration. The ungrammaticality of the following examples illustrates that this c-command relationship characterizes depictive participle constructions, just as it characterizes depictive constructions in general (as illustrated in chapter 4).

- (48) \*Ira            tolknula   Ivana<sub>i</sub>       kurjaščim<sub>i</sub>.  
       Ira-NOM    pushed    Ivan-ACC   smoking-INSTR

- (49) \*Ja            vljubilas’   v   studenta<sub>i</sub>       pevšim<sub>i</sub>            Gandelja.  
       I-NOM   fell-in-love   in   student-ACC   singing-INSTR   Handel-ACC

These examples are ungrammatical with a depictive interpretation because the internal arguments are merged within an additional layer of structure, such as an ApplP (or arguably a PP) in example (48), and a PP in example (49). Case agreement is possible in these examples, but only with an NP reduced relative attribute/clause interpretation.

Depictive participle constructions not only exhibit all the same structural constraints as depictive adjectival predicates, they also encode the same aspectual distinctions. Native speakers claimed that a participle with instrumental

Case marking, for instance, focuses on a situation that held at a particular point in time, whereas one with Case agreement does not. In an example like (36) (p. 183), for instance, repeated below as (50), the participle with instrumental Case marking focuses on Ivan's state when he was brought home, but says nothing about his state after this point in time. That is, the instrumental participle denotes an eventuality that held at a particular point in time—it is bounded. The participle with Case agreement, on the contrary, does not focus on Ivan's yelling at a particular point in time, but rather simply describes the fact that he was yelling. The participle with Case agreement can therefore imply that he was still yelling after he was brought home or at the Utterance Time, since it describes an unbounded eventuality.

- (50) Druz'ja            priveli    Ivana<sub>i</sub>        domoj    oruščego<sub>i</sub>/<sub>i</sub>  
 Friends-NOM brought Ivan-ACC home yelling-ACC/  
 oruščim    blatnye    pesni.  
 -INSTR    thieves'    songs  
 'His friends brought Ivan home yelling thieves' songs.'

In fact, often a predicative participle with Case agreement was ungrammatical or marginal for some speakers in a depictive construction due to a semantic mis-match between the meaning of the primary predicate combined with an unbounded interpretation of the participle. A participle with Case agreement sounded strange to some speakers in the following example, for instance, evoking comments like: 'How can they stop him, but he continue to cross the road?' This intuition makes sense if only the instrumental Case-marked participle is interpreted as bounded.

- (51) Ego            ostanovili    perexodjaščim/    ?perexodjaščego    čerez    ulicu.  
 him-ACC stopped crossing-INSTR/ ?-ACC across street  
 'They stopped him crossing the street.'

In chapter 4, I posited that depictive adjectival predicates in the East Slavic languages were dominated by an AspP. More precisely, I suggested that in Belarusian and Ukrainian all depictives are dominated by an AspP, whereas in Russian only instrumental Case-marked predicates (i.e. bounded predicates) are dominated by this additional level of structure. The presence of this additional level of structure was supported by *wh*-movement facts, namely in Russian only instrumental Case-marked depictive adjectives can undergo *wh*-movement; thus, only these predicates are dominated by an additional level of structure which provides an escape hatch for *wh*-extraction. The following examples illustrate that depictive predicative participles exhibit the same *wh*-movement constraints as depictive adjectival predicates in Russian.

(52) *Wh-extraction of depictive adjectives:*

- a. Kakim<sub>i</sub>                      druž'ja    priveli    Ivana<sub>i</sub>    domoj t<sub>i</sub>?  
 in-what-state-INSTR friends brought Ivan-ACC home  
 (Otvét: P' jany<sub>i</sub>.)  
 (Answer: drunk-INSTR.)  
 'In what state did his friends bring Ivan home? (Answer: drunk.)'
- b. \*Kakogo<sub>i</sub>                      druž'ja    priveli    Ivana<sub>i</sub>    domoj t<sub>i</sub>?  
 in-what-state-ACC friends brought Ivan-ACC home  
 (Otvét: P' janogo<sub>i</sub>.)  
 (Answer: drunk-ACC.)  
 'In what state did his friends bring Ivan home? (Answer: drunk.)'

(53) *Wh-extraction of a depictive participle:*

- a. Kakim<sub>i</sub>                      druž'ja    priveli    Ivana<sub>i</sub>    domoj t<sub>i</sub>?  
 in-what-state-INSTR friends brought Ivan-ACC home  
 (Otvét: Oruščim<sub>i</sub>    blatnye    pesni.)  
 (Answer: yelling-INSTR thieves' songs.)  
 'In what state did his friends bring Ivan home? (Answer: Yelling thieves' songs.)'
- b. \*Kakogo<sub>i</sub>                      druž'ja    priveli    Ivana<sub>i</sub>    domoj t<sub>i</sub>?  
 in-what-state-ACC friends brought Ivan-ACC home?  
 (Otvét: Oruščego<sub>i</sub>    blatnye    pesni.)  
 (Answer: yelling-ACC thieves' songs.)

Notice that in both depictive adjectival and participle constructions only the instrumental Case-marked predicate can undergo *wh*-movement. Notice further that for most speakers *wh*-movement of an element out of the predicative participle phrase with instrumental Case marking was considered awkward, but significantly better than *wh*-movement out of a PartP with Case agreement, as the following examples illustrate.<sup>20</sup>

- (54) ?Čto<sub>k</sub>                      druž'ja    priveli    Ivana<sub>i</sub>    domoj    oruščim<sub>i</sub> t<sub>k</sub>  
 what-ACC friends brought Ivan-ACC home yelling  
 (Otvét: Blatnye    pesni.)  
 (Answer: thieves' songs.)  
 'What did his friends bring Ivan home yelling? (Answer: Thieves' songs.)'

<sup>20</sup> The awkwardness associated with *wh*-movement out of a predicative participle construction with instrumental Case marking may be linked to the status of this construction as an adjunct and not a complement. That is, Huang (1982) has shown that *wh*-movement out of a complement tends to be more felicitous than movement out of an adjunct.

- (55) \*Čto<sub>k</sub>        druž'ja    priveli    Ivana<sub>i</sub>        domoj    oruščego<sub>i</sub> t<sub>k</sub>  
           what-ACC   friends   brought   Ivan-ACC   home   yelling-ACC

These patterns suggest that, like adjectival depictive constructions, (non-verbal) AspP is only merged with instrumental Case-marked predicative participles in Depictive-ING constructions; it is absent when the predicate exhibits Case agreement. Thus, the lower (non-verbal) AspP in the configuration under (47) (p. 186) is only present when the participle occurs in the instrumental Case. I assume that, as in adjectival depictive and Perceive-ING constructions, the instrumental Case in depictive participle constructions is the morphological manifestation of a [+bounded] Asp. That is, again AspP, like *v*P, provides an escape hatch for *wh*-extraction and values Case. The unbounded interpretation of a participle with Case agreement, as expected, is therefore the default interpretation that can arise in the absence of an AspP. Furthermore, Case agreement occurs on the participle via Agree with its antecedent, as discussed on p. 182 above.

### 2.3 ACC-ING

There is one final participle construction in Russian that resembles an -ING participle in English, namely the so-called ACC-ING construction illustrated under (7) (p. 169), repeated below under (57).

- (56) ACC-ING:  
       Ja        nenavižu    Ivana<sub>i</sub>        kurjaščego<sub>i</sub>/    kurjaščim<sub>i</sub>.  
       I-NOM   hate        Ivan-ACC   smoking-ACC/   -INSTR  
       'I hate Ivan smoking.'

This type of participle construction occurs with psychological experiencer states like *nenavidet'* 'to hate'. There was quite a bit of speaker variation regarding the existence of these constructions in Russian and their different Case-marking possibilities. Some speakers claimed this type of construction was unnatural. For those who accepted it, not all accepted the instrumental Case on the participle. Furthermore, for most speakers the participle with Case agreement could only occur as an NP reduced relative attribute/clause. For these speakers, the pronoun *kogo* 'who', for example, referred to the entire string [*Ivana kurjaščego*] in a construction like (57), and *wh*-movement was ungrammatical out of the PartP, as illustrated in examples (58) and (59).

- (57) Kogo<sub>i</sub>        ja    nenavižu–    (tak èto)    [Ivana        kurjaščego]<sub>i</sub>.  
       who-ACC   I   hate        (so this)    Ivan-ACC   smoking-ACC  
       'Who I hate is the Ivan smoking/smoking Ivan.'



- (58) \*Čto<sub>i</sub>            ty            ненави́диш'    Ivana        куря́щего t<sub>i</sub>?  
           what-ACC    you-NOM    hate            Ivan-ACC    smoking-ACC  
           (Otvet:     sigarety).  
           (Answer:    cigarettes)  
           (intended interpretation) 'What do you hate Ivan smoking?  
           (Answer: Cigarettes.)'
- (59) \*Kakogo<sub>i</sub>            ty            ненави́диш'    Ivana<sub>i</sub> t<sub>i</sub>?  
           in-what-state-ACC    you-NOM    hate            Ivan-ACC  
           (Otvet:     Kurjaščego     sigarety.)  
           (Answer:    smoking-ACC    cigarettes.)

That *kogo* 'who' can refer to the entire string [*Ivana kurjaščego*] in example (57) suggests that the participle is merged within the NP. Furthermore, the ungrammaticality of *wh*-movement out of the PartP in examples (58) and (59) suggests that the participle constitutes a (tensed) reduced relative attribute/clause.

It is widely believed that ACC-ING structures in English are clausal constituents of some type (for discussion see Battistella 1983; Horn 1975; Iwakura 1984; Johnson 1988; Reuland 1983; Schachter 1976). In Russian (for those speakers who accept it), the participle with instrumental Case marking in ACC-ING constructions exhibits structurally identical behaviour to the participles with instrumental Case marking in Perceive-ING constructions, that is, it functions as a clausal constituent with its antecedent. The colloquial pseudo-cleft diagnostics and *èto* 'this' substitution test, for instance, suggest that the participle and its antecedent in ACC-ING constructions behave like a clausal constituent, as the following examples illustrate:

- (60) Čto<sub>i</sub>            ja            ненави́žu— (tak èto) [Ivana  
           What-ACC    I-NOM    hate            (so this)    Ivan-ACC  
           kurjaščim]<sub>i</sub>.  
           smoking-INSTR  
           'What I hate is Ivan smoking.'
- (61) \*Kogo<sub>i</sub>        ja            ненави́žu— (tak èto) [Ivana     kurjaščim]<sub>i</sub>.  
           who-ACC    I-NOM    hate            (so this)    Ivan-ACC    smoking-INSTR
- (62) Ja            ненави́žu [Ivana     kurjaščim]<sub>i</sub>,     i     Katja    èto<sub>i</sub>  
           I-NOM    hate            Ivan-ACC    smoking-INSTR    and    Katia    this  
           tože    ненави́dit.  
           also    hates  
           'I hate Ivan smoking and Katja hates this/it too.'

Examples (60) and (62) demonstrate that the participle with instrumental Case marking and its antecedent behave as a constituent syntactically in the ACC-ING construction, and example (61) illustrates that this constituent is not an NP. As expected, *wh*-movement of a participle with instrumental Case marking was also possible for speakers who accepted instrumental Case-marked participles in ACC-ING constructions, whereas *wh*-movement of a participle with Case agreement was not (although for a small number of speakers a participle with Case agreement exhibited the same syntactic behaviour as one with instrumental Case marking; that is, ACC-ING constructions mirrored Perceive-ING constructions for some speakers in that a participle with either Case agreement or instrumental Case marking could constitute a clausal complement). Notice finally that the participle and its antecedent not only behave as a constituent syntactically in ACC-ING constructions, they also function as a unit semantically. That is, a construction like *Ja nenavižu Ivana kurjaščim* 'I hate Ivan smoking' does not entail that the speaker hates Ivan, but rather what the speaker hates is the eventuality of Ivan smoking. (This same interpretation holds for most speakers for the participle with Case agreement in these constructions, even if it is merged within the NP.)

The instrumental Case-marked participle in ACC-ING constructions not only exhibits the same structural patterns as an instrumental Case-marked participle in Perceive-ING constructions, it also encodes the same grammatical aspectual nuances. Native speakers claimed, for instance, that a participle with instrumental Case marking in ACC-ING constructions implies that the speaker hates it when Ivan smokes. A participle with Case agreement, on the contrary, indicates that the speaker hates it that Ivan smokes, that is, it can imply that Ivan is a smoker. Thus only the participle with Case agreement implies that Ivan's smoking is not bounded in time. As expected, if we add a time expression like *ves' den'* 'all day' to an ACC-ING construction, creating a construction with an unbounded interpretation like 'I hate Ivan smoking all day' (i.e. an interpretation which implies that he is always smoking, not that he begins and finishes his smoking within a set time period), then the instrumental Case-marked participle becomes ungrammatical or marginal, as the following example illustrates:

- (63) Ja           nenavižu   Ivana       kurjaščego/       \*kurjaščim   ves'   den'.  
       I-NOM   hate       Ivan-ACC   smoking-ACC/   \*-INSTR   all   day  
       'I hate Ivan smoking all day.'

The syntactic and semantic patterns outlined above suggest there is no reason to treat ACC-ING constructions differently from Perceive-ING constructions in Russian. The only real difference between Perceive- and ACC-ING

constructions is that the former is more widely accepted than the latter. As mentioned at the beginning of this chapter, this fact, however, is not surprising, given Noonan's (1985: 62) observation that the only place in complement systems cross-linguistically where participles are regularly found is in complements to verbs of perception.

Thus far, I have focused on additional evidence in Russian for a link between grammatical aspect and Case and have shown that predicative participles, like depictive adjectives, use Case morphology to encode grammatical aspectual contrasts. In the following section I provide further evidence for the link between Case and aspect in the East Slavic languages in general. In particular, I show that the instrumental–Case agreement dichotomy in copular constructions in the East Slavic languages is also linked to grammatical aspect.

### 3. Copular constructions in the East Slavic languages

In this section I focus on one final instrumental–Case agreement dichotomy in the East Slavic languages, namely the opposition between the instrumental versus nominative Case in copular constructions. The Case-marking patterns in Russian copular constructions have received a significant amount of attention in the literature,<sup>21</sup> yet the parallels and differences between these constructions across the East Slavic languages have been largely ignored. In this section I will support the hypothesis put forth in Ionin and Matushansky 2002 and Richardson 2003a that in Russian copular constructions a predicate occurs in the instrumental Case if the eventuality it describes is bounded in time, whereas it occurs in the nominative if it is unbounded. I extend this analysis to Belarusian and to most Ukrainian copular constructions, although I show that the syntax of copular constructions varies across the three languages. This section therefore provides one further piece of evidence that the instrumental Case and grammatical aspect are intimately connected in the East Slavic languages.

#### 3.1 *Predicational, specificational, and equative copulas in East Slavic*

In the East Slavic languages the instrumental versus Case agreement opposition only occurs in so-called PREDICATIONAL and SPECIFICATIONAL constructions (in the past tense and *bud*-FUTURE). It is absent in so-called

<sup>21</sup> See, for instance, Bailyn and Rubin (1991), Bailyn (2001), Ionin and Matushansky (2002), Jakobson (1936/1971), Matushansky (2000), Pereltsvaig (2001), Potebnja (1888/1958), Richardson (2003a, 2003b), and Wierzbicka (1980).

EQUATIVE (OR IDENTITY) constructions. The differences between predicational, specificational and equative constructions are based on the distinctions presented in Higgins' (1979) seminal work. As Mikkelsen (2005: 1–2) notes, predicational clauses tell us something about the referent of the subject. Specificational clauses, on the contrary, do not tell us something about the referent of the subject, but rather they tell us who or what the referent is. Finally, equatives involve two expressions denoting the same individual and the function of the copula is to equate the referents of these two expressions. The following examples illustrate these three types of copular constructions in English, Belarusian, Russian and Ukrainian (without the different Case-marking patterns they exhibit in the East Slavic languages).<sup>22</sup> As is clear from the Belarusian, Russian, and Ukrainian examples, a pronominal copula can occur in equative constructions. This pronominal is fixed in form and never induces agreement morphology on the verb. (I have included both *ce* and *to* as the pronominal copula in the Ukrainian examples, since the preference for one or the other is subject to dialectal variation.)<sup>23</sup>

(64) *English*:

- a. Ingrid Bergman is the lead actress in that movie. (predicational)
  - b. The lead actress in that movie is Ingrid Bergman. (specificational)
  - c. She is Ingrid Bergman. (equative)
- (Mikkelsen 2005: 1)

(65) *Belarusian*:

- a. Maksim — doktor. (predicational)  
Maksim-NOM doctor-NOM  
'Maksim is a doctor.'
- b. Doktor — Maksim. (specificational)  
doctor-NOM Maksim-NOM  
'The doctor is Maksim.'
- c. Doktor Žekil — geta spadar Hajd. (equative)  
doctor Jekyll this mister Hyde  
'Doctor Jekyll is Mister Hyde.'

<sup>22</sup> I do not consider so-called EXISTENTIAL BE in this chapter like Russian *V Moskve (est') tramvai* and Belarusian *U Maskve josc' tramvaj* 'In Moscow there is a tram'. See Chvany (1975) for the claim that existential BE constitutes a separate lexical item from copular BE in Russian. She provides seven criteria for distinguishing between the two types of BE. There is no Case-marking opposition in existential BE constructions.

<sup>23</sup> See Geist (2006, forthcoming) for detailed discussion of the differences between predicational, specificational, and equative constructions in Russian.

- (67) *Ukrainian:*

The three interpretations encoded by predicational, specificational, and equative constructions can be represented in a type-theoretic way (as suggested in Mikkelsen 2005, and elsewhere), as shown in Table 5.2. These type-theoretic representations of copular constructions are based on Partee's (1987) seminal work on NP interpretation. Partee claims that noun phrases can receive three different interpretations: they can be interpreted as generalized quantifiers ( $\langle\langle e, t \rangle, t \rangle$ )—they denote sets of individuals; as referential ( $\langle e \rangle$ )—they denote an individual; and as predicative ( $\langle e, t \rangle$ )—they denote sets of

TABLE 5.2.

| Clause type     | Subject | Complement |
|-----------------|---------|------------|
| Predicational   | <e>     | <e, t>     |
| Specificational | <e, t>  | <e>        |
| Equative        | <e>     | <e>        |

individuals.<sup>24</sup> The following examples illustrate these three interpretations (examples cited in Mikkelsen 2005: 53–4):

- (68) **Every politician** is corrupt. (generalized quantifier)  
 (69) **The whale** struck **the ship**. (referential)  
 (70) Shirin Ebadi is **a lawyer** (by profession). (predicative)

To paraphrase Mikkelsen (2005: 53–4), a generalized quantifier like ‘every politician’ in example (68) denotes the set of properties that every politician has and not the set containing every politician. The referential DPs in example (69) refer to a particular whale and a particular ship and the construction is only true if the former struck the latter, that is, the referential DP interpretation underlies the mentioning of a particular individual (or entity). The predicative DP ‘a lawyer’ in example (70) denotes the set of all lawyers, that is, it does not refer to a particular lawyer, and this construction is true if Shirin Ebadi is a member of this set. Partee (1987) claims that every kind of noun phrase has one of the three types of interpretation above, but it may shift into one of the other types via what she terms TYPE-SHIFTING OPERATIONS (see her analysis for discussion).

As discussed in Geist (2006, forthcoming), the instrumental Case can arise in Russian copular constructions on the element with a predication (<e, t>) interpretation. This element can also occur in the nominative Case, as the examples under (71a) and (71b) below illustrate.<sup>25</sup> Since equative constructions do not have a type <e, t> argument, the instrumental Case does not occur in these constructions. These same patterns also hold in Belarusian and (some) Ukrainian copular constructions, as the examples under (72) and (73) illustrate (although example (72c) is stylistically awkward in Belarusian):

- (71) *Case-marking patterns in Russian:*  
 a. Maksim byl vrač/ vračom. (predicational)  
     Maksim-NOM was doctor-NOM/ -INSTR  
     ‘Maksim was a doctor.’  
 b. Vrač/ Vračom byl Maksim. (specificational)  
     doctor-NOM/ -INSTR was Maksim-NOM  
     ‘The doctor was Maksim.’

<sup>24</sup> The term PREDICATIVE should not be confused with the term PREDICATIONAL: only the latter refers to a particular type of copular construction.

<sup>25</sup> In fact the instrumental Case is generally restricted to predicative NPs in Russian specificational constructions, not APs. See Geist (forthcoming) for convincing evidence that this restriction is not syntactic in nature, but rather it is directly related to pragmatic facts.

- c. Ciceron — èto byl Tullij/ (equative)  
 Cicero this-NEUT was-MASC Tully-NOM. MASC/  
 \*Tulliēm.  
 \*-INSTR. MASC  
 (intended interpretation) ‘Cicero was Tully.’  
 (Geist, forthcoming)

(72) *Case-marking patterns in Belarusian:*

- a. Maksim byŭ doktor/ doktaram. (predicational)  
 Maksim-NOM was doctor-NOM/ -INSTR  
 ‘Maksim was a doctor.’
- b. Doktor/ Doktaram byŭ Maksim. (specificational)  
 doctor-NOM/ -INSTR was Maksim-NOM  
 ‘The doctor was Maksim.’
- c. Doktor Žekil — geta byŭ spadar Hajd/ (equative)  
 Doctor Jekyll-NOM this was Mister Hyde-NOM/  
 \*spadarom Hajdam.  
 \*-INSTR  
 ‘Doctor Jekyll was Mister Hyde.’

(73) *Case-marking patterns in Ukrainian:*

- a. Maksym buv likar/ likarem. (predicational)  
 Maksym-NOM was doctor-NOM/ -INSTR  
 ‘Maksym was a doctor.’
- b. Likar/ Likarem buv Maksym.<sup>26</sup> (specificational)  
 doctor-NOM/ -INSTR was Maksym-NOM  
 ‘The doctor was Maksym.’
- c. Doktor Žekil — ce/to buv mister Xajd/ (equative)  
 doctor Jekyll-NOM this was mister Hyde-NOM/  
 \*misterom Xajdom.  
 \*-INSTR  
 ‘Doctor Jekyll was Mister Hyde.’

These examples illustrate that equative constructions differ from predicational and specificational constructions in all three languages in two respects: They do not exhibit an instrumental–Case agreement dichotomy and they can merge an additional element in the syntax—a fixed pronominal element. This pronominal element is ungrammatical in predicational and

<sup>26</sup> In the right context, with focus stress on *likarem* ‘doctor’, example (73b) can have a predicational interpretation, i.e. *Likarem je Maksym!* can mean ‘Maksym is a doctor, not a farmer, lawyer, etc.’

specificational constructions in Belarusian and Russian, as the following examples illustrate:

(74) *Belarusian:*

- a. \*Maksim — geta doktor. (predicational)  
       Maksim-NOM this doctor-NOM
- b. \*Doktar — geta Maksim. (specificational)  
       doctor-NOM this Maksim-NOM

(75) *Russian:*

- a. \*Maksim — èto vrač'. (predicational)  
       Maksim-NOM this doctor-NOM
- b. \*Vrač' — èto Maksim. (specificational)  
       doctor-NOM this Maksim-NOM

The pronominal copula is, however, grammatical in predicational and specificational constructions in Ukrainian for many speakers (although some claim that these constructions are awkward or unnatural), as the examples under (76) illustrate.

(76) *Ukrainian:*

- a. Maksym — ce/to naš drug. (predicational)  
       Maksym-NOM this our friend-NOM  
       ‘Maksym is our friend.’
- b. Naš drug — ce/to Maksym. (specificational)  
       our friend-NOM this Maksym-NOM  
       ‘Our friend is Maksym.’

In addition, for some (although not all) native speakers a type of dual copular construction is possible in Ukrainian,<sup>27</sup> whereby the pronoun is followed by a form of BE in predicational and specificational constructions. Unlike the predicational and specificational constructions under (73) above, the instrumental Case is ungrammatical in these constructions:

- (77) Maksym — ce/to je/buv/bude naš drug/  
       Maksym-NOM this is/was/will-be our friend-NOM/  
       \*našym drugom.  
       \*-INSTR  
       ‘Maksym is/was/will be our friend.’

<sup>27</sup> The term DUAL COPULA is based on Citko's (2006a) use of this term to describe similar constructions in Polish.



- (78) Naš drug/                      \*Našym drugom —    ce/to    je/buv/bude  
       our friend-NOM/    \*-INSTR                      this    is/was/will-be  
       Maksym.  
       Maksym-NOM  
       ‘Our friend is/was/will be Maksym.’

These examples demonstrate that we cannot equate all instrumental Case marking with a predicative (<e, t>) complement, given the ungrammaticality of the instrumental Case on the predicative complement in these constructions.

Finally, Ukrainian, unlike Belarusian or Russian, also has a construction with an overt unchanging present tense/PRESENT TENSE form *je*, which takes an instrumental C/case-marked predicate (and, for some speakers, a nominative predicate):

- (79) Kyjiv                      je    stolyceju                      Ukrajinu                      (predicational)  
       Kiev-NOM    is    capital-INSTR    Ukraine  
       (/stolycja                      Ukrajinu)  
       (/capital-NOM    Ukraine)  
       ‘Kiev is the capital of Ukraine.’
- (80) Stolyceju                      Ukrajinu    (/Stolycja                      Ukrajinu)    (specificational)  
       capital-INSTR    Ukraine    (/capital-NOM    Ukraine)  
       je    Kyjiv.  
       is    Kiev  
       ‘The capital of Ukraine is Kiev.’

This construction differs significantly from the PRESENT TENSE zero copular construction in the East Slavic languages, as in the zero copula the instrumental Case is ungrammatical. In what follows, I discuss the behaviour of copular constructions in Ukrainian in a separate section (section 3.3) from Belarusian and Russian (section 3.2), given the different distribution of copular constructions and Case-marking patterns across the three languages. I shall show, however, that where a Case-marking opposition exists in Ukrainian, this opposition is linked to grammatical aspect, just as it is in Belarusian and Russian.

A number of linguists have aligned predicational and specificational copulas in a variety of languages, positing, for instance, that specificational constructions are inverted predicational structures (Adger and Ramchand 2003; Geist 2006, forthcoming; Heggie 1988; Heycock 1994; Mikkelsen 2005; Moro 1997; Partee 1986; Williams 1983b; and Zamparelli 2000, among others).<sup>28</sup>

<sup>28</sup> For the alternative hypothesis that specificational clauses should be aligned instead with equatives see Heycock and Kroch (1999, 2002) and Rothstein (2001).

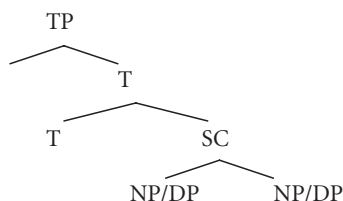
Chvany (1975) suggested that predication and specificational constructions in Russian involve one copula with inversion occurring around the copula. Padučeva and Uspensky (1979, 1997), Partee (1998), and Geist (2006, forthcoming) essentially come to the same conclusion. In fact, Partee (1998) claims that the inversion analysis for these constructions is more straightforward in Russian than it is in English. I essentially follow Geist (2006, forthcoming) in the claim that specificational copulas are related to predication copulas and can be analysed as predicate inversions motivated by pragmatic factors, that is, by topic-comment structure. Mikkelsen (2005) comes to the same conclusion for English and Danish. She maintains that predication and specificational clauses are truth-conditionally equivalent when they contain the same DPs and states that differences between these types of constructions are due to discourse features, that is, topic-focus features. I accept this hypothesis for all the East Slavic languages without further comment. In what follows, I will therefore not discuss the relationship between predication and specificational copular constructions further, and I will focus primarily on the Case-marking patterns in predication constructions.

Linguists tend to divide into two camps when it comes to the structure of the copula in predication versus equative constructions in various languages. Some claim that there is one BE and differences in interpretation are the result of different complementation possibilities (Heggie 1988; Moro 1997; Partee 1986; and Williams 1983b, among others). Others claim that there are two copula verbs, a BE of identity (in equatives) and a BE of predication (in predicationals) (Higgins 1979; Rapoport 1987; Russell 1919; and Zaring 1996 among others). For these scholars the copula can constitute a lexical verb that signifies identity between its arguments (equatives), or it can constitute a semantically empty element (predicationals). My concern in this chapter is with the behaviour of predication copulas, since only these exhibit a Case marking alternation in the East Slavic languages which, I shall show shortly, is linked to grammatical aspect. In the spirit of Pereltsvaig (2001), for the time being, I assume that the small clause complement in equatives differs from the small clause complement in predicationals in Russian in that it constitutes a so-called BARE small clause versus a RICH one,<sup>29</sup> although nothing in the following analysis rests crucially on this hypothesis. I also assume that

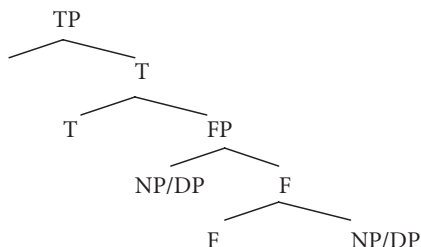
<sup>29</sup> I do not, however, adopt Pereltsvaig's analysis that nominative Case marking in general in Russian copular constructions is linked to the presence of a bare versus a rich small clause.

Pereltsvaig's hypothesis can also account for the structure of equatives in Belarusian and Ukrainian. The following configurations illustrate the different structure of bare and rich small clause complements (FP stands for functional projection):

(81) *Bare small clause complement:*



(82) *Rich small clause complement:*



In what follows I shall suggest that many predicational copular constructions in the East Slavic languages merge with a small clause complement that has an additional layer of functional structure, that is, an AspP. I shall demonstrate that this AspP is motivated both semantically and syntactically.

### 3.2 *Copular constructions in Russian and Belarusian*

Various hypotheses have been put forth to account for the semantics of the instrumental versus Case agreement alternation in copular constructions in Russian. Jakobson (1936/1971), for instance, suggested that a predicate in the instrumental Case denotes a more temporary eventuality, whereas one in the nominative describes a more permanent one. In effect, this is the most popular hypothesis in many descriptions of the nominative–instrumental Case-marking opposition in Russian copular constructions (e.g. Galkina-Fedoruk et al. 1958; Křžižková 1969; Miklosich 1926; Peškovskij 1938; and Vinogradov 1960, among others). A similar hypothesis has been articulated for Belarusian, as Mayo (1993) notes. Wierzbicka (1980) posits that an instrumental Case-marked predicate in Russian describes an accidental property,

whereas one with Case agreement denotes an essential one. Potebnja (1888, 1958) maintained that nominative predicates denote an exhaustive or defining property versus a non-exhaustive one (instrumental). In what follows, I shall build on the insights presented in Ionin and Matushansky 2002 and Richardson 2003a for Russian copular constructions. I shall illustrate that the instrumental versus Case agreement opposition in copular constructions in the East Slavic languages manifests exactly the same grammatical aspectual contrast found in depictives across the East Slavic languages and in predicative participle constructions in Russian, namely the instrumental Case-marked predicate indicates that the eventuality denoted by the predicate is bounded in time, whereas one with Case agreement does not. Geist (2006) comes close to positing a similar hypothesis for Russian. She correctly states that the Case-marking opposition in copular constructions in Russian is linked to context and the speaker's point of view. According to her, the type of TOPIC SITUATION is crucial in determining whether the instrumental or nominative Case agreement will arise on the predicate, namely a specific topic situation contrasted with another will result in instrumental Case marking, whereas the lack of any focus on a specific topic situation (and correspondingly no contrast with another topic situation) will result in nominative Case marking. The hypothesis that an instrumental Case-marked predicate focuses on a topic situation contrasted with another can be captured in an analysis that links the instrumental Case and grammatical aspect. Recall, for instance, that perfective verbs in the East Slavic languages are qualitatively different from prior and/or subsequent states of affairs (i.e. eventualities) (Dickey 2000). That is, part of one of the very definitions of bounded eventualities is that they are contained within the Topic Time and that they are, in a sense, contrasted with different (prior/subsequent) eventualities. The TEMPORARY, ACCIDENTAL, and NON-EXHAUSTIVE interpretations posited for the semantics of the instrumental Case in earlier works are also a side effect of the grammatical aspect of the predicate, that is, of the interpretation that the eventuality denoted by the predicate only holds during (a subinterval of) the Topic Time. Since a predicate with Case agreement does not imply that an eventuality is bounded in time a more permanent, essential or exhaustive/defining interpretation of the predicate can arise as a side effect of the unbounded status of the predicate.

As mentioned above, the instrumental–Case agreement opposition is most prevalent with the past tense copula. The interpretation of examples like (83) and (84) below in Russian and Belarusian suggest that the Case-marking opposition with the past tense copula is directly linked to differences in grammatical aspectual interpretation.

- (83) Gorod byl bol'soj/ bol'sim. (Russian)  
town-NOM was big-NOM/ -INSTR  
'The town was big.'
- (84) Janka byŭ student/ studentam. (Belarusian)  
Janka-NOM was student-NOM/ -INSTR  
'Janka was a student.'

Consider first the interpretation of the two adjectives in Russian in example (84). The instrumental Case-marked adjective in this example, unlike the nominative, implies that the town is no longer big, that is, it focuses on a time before some change occurred, such as the inhabitants leaving the town for economic reasons. That is, the adjective with instrumental Case marking refers to the state of the town at a particular point in time—the Topic Time—and implies that this state holds during the Topic Time only. Furthermore, this state is qualitatively different from subsequent states of affairs, which, as already mentioned, is part of the definition of the perfective aspect in the East Slavic languages (Dickey 2000). The adjective with Case agreement, on the contrary, does not focus on a specific point in time when the town was big (before some change occurred, for example), instead it simply indicates that the town was big without necessarily implying that it is no longer big. That is, the adjective with nominative Case marking describes an unbounded eventuality—an eventuality that is not contained within the Topic Time. Native speakers of Belarusian claimed that the same sorts of contrasts are conveyed by the instrumental–Case agreement dichotomy in an example like (84). The NP with instrumental Case marking in this example, for instance, focuses on the fact that Janka was a student at a particular point in time in the past. The NP with Case agreement, on the contrary, does not focus on Janka’s status at a particular point in time, Janka could still be a student at the Utterance Time. Thus, as in Russian, only the predicate that describes an eventuality which is bounded occurs with instrumental Case marking. A predicate that describes an eventuality which holds throughout (and potentially extends beyond) the Topic Time and is not qualitatively different from prior and/or subsequent states of affairs, namely an unbounded predicate, occurs with Case agreement.

The hypothesis that only instrumental Case-marked predicates describe eventualities that are bounded in time predicts that only these predicates should be grammatical when a construction is explicitly bounded. The following examples illustrate that this prediction is borne out, namely the instrumental predicate is obligatory or strongly preferred in a construction if we add the ‘for X time’ adverbial in both Belarusian and Russian (this pattern in Russian is discussed in Geist 2006, Matushansky 2000, Pereltsvaig 2001, and Seliverstova 1982):

- (85) Jana byla blandzinkaj/ \*blandzinka 2 gady. (Belarusian)  
 Jana-NOM was blonde-INSTR/ \*-NOM 2 years  
 'Jana was a blonde for two years.'
- (86) Ivan byŭ pjanym/ ?pjany 30 xvilin.  
 Ivan-NOM was drunk-INSTR/ ?-NOM 30 minutes  
 'Ivan was drunk for thirty minutes.'
- (87) On neskol'ko let byl direktorom/ \*direktor. (Russian)  
 he-NOM several years was director-INSTR/ \*-NOM  
 'He was a/the director for several years.'  
 (Seliverstova 1982: 144)
- (88) Ivan byl p'janym/ ?p'janyj 30 minut.  
 Ivan-NOM was drunk-INSTR/ ?-NOM 30 minutes  
 'Ivan was drunk for thirty minutes.'

The adverbial time expressions 'for two years', 'for thirty minutes' and 'several years' in these examples explicitly specify that the property denoted by the predicate is bounded in time, that is, it only held for a certain period of time. As expected, the instrumental Case on the predicate in both languages is obligatory or strongly preferred (some speakers accept Case agreement on an adjective when focus is on duration rather than boundedness). Furthermore, as noted in Matushansky 2000, if we explicitly bound the copula in Russian with the prefix *po-*, creating the verb *po-byt* 'to be/stay for a short time', only the instrumental Case is grammatical on the predicate, as example (89) below illustrates (this pattern is also discussed for Russian *pro-byt* 'to be for a certain time' in Geist 1999). This same pattern also occurs in Belarusian (example 90).

- (89) Ja pobyla zavedujuščej/ \*zavedujuščaja. (Russian)  
 I-NOM was-PF manager-INSTR/ \*-NOM  
 'I was a/the manager for a while.'  
 (Matushansky 2000: 299)
- (90) Ja pabyŭ dyrèktaram/ \*dyrèktar. (Belarusian)  
 I-NOM was-PF director-INSTR/ \*-NOM  
 'I was a/the director for a while.'

These examples strongly support the hypothesis that the instrumental Case arises on a predicate when that predicate describes an eventuality that is bounded in time.<sup>30</sup>

<sup>30</sup> Matushansky (2000) claims that the instrumental Case is obligatory in Russian copular constructions when the copula is explicitly marked for grammatical aspect, including the imperfective aspect, hence the ungrammaticality of a construction like (i) below with the imperfective habitual copula *byvat* 'is/has been':

As already mentioned, the instrumental Case is ungrammatical on a predicate with the PRESENT TENSE zero copula in Belarusian and Russian, as examples (91) and (92) illustrate.

(91) *Russian:*

- a. Ivan — prepodavatel'/ \*predpovavatelem.  
 Ivan-NOM teacher-NOM/ \*-INSTR  
 'Ivan is a teacher.'
- b. Ivan p'janyj/ \*p'janyj.  
 Ivan drunk-NOM/ \*-INSTR  
 'Ivan is drunk.'

(92) *Belarusian:*

- a. Janka — student/ \*studentam.  
 Janka-NOM student-NOM/ \*-INSTR  
 'Janka is a student.'
- b. Janka pjany/ \*pjanyj.  
 Janka-NOM drunk-NOM/ \*-INSTR  
 'Janka is drunk.'

Recall Smith's (1991/1997: 151–2) claim, discussed in chapter 2 pp. 132; 178–9 that it is pragmatically infelicitous to refer to an eventuality in the PRESENT TENSE with a viewpoint that includes its initial and final point, that is, the viewpoint must exclude an endpoint. Herein lies the explanation for why an instrumental Case-marked predicate is not possible with the zero copula in

- i. Ja byvala zavedujuščej/ \*zavedujuščaja.  
 I-NOM was-IMPF.HAB manager-INSTR/ \*-NOM  
 (roughly) 'I was often a/the manager.'  
 (Matushansky 2000: 300)

The grammaticality of the following example, however, suggests that this generalization is incorrect.

- ii. Ja byvaju p'janyj/ trezvyj/ serdityj/ veselyj.  
 I-NOM am-IMPF.HAB drunk-NOM/ sober-NOM/ angry-NOM/ happy-NOM  
 (roughly) 'I am often drunk/sober/angry/happy.'

The correct generalization appears to be that Individual-level predicates (which, recall from chapter 4, includes NPs with Case agreement) are ungrammatical with the imperfective habitual copula, whereas Stage-level predicates are fine, as example (iii) below versus (ii) above suggests.

- iii. \*Ja byvaju zavedujuščaja/ umnaja.  
 I-NOM am-IMPF.HAB manager-NOM/ intelligent-NOM  
 (intended interpretation) 'I am often a/the manager/intelligent.'

An instrumental Case-marked NP is grammatical with imperfective habituais, since it is interpreted as more episodic, i.e. more like an S-level predicate, as discussed in chapter 4. I am grateful to Ora Matushansky for discussing these examples with me.

Belarusian and Russian: an instrumental Case-marked predicate has a final point, since it is bounded in time; thus, it is infelicitous in the PRESENT TENSE in both languages.

As also already mentioned, in both Belarusian and Russian there is a strong tendency for the predicate to have instrumental Case marking when it occurs with the non-past copula *bud-*, which is generally interpreted as the FUTURE TENSE. Chvany (1975), Ferrell (1953), Jakobson (1957/1971), and Pettersson (1972) suggest that *bud-* is an (unprefixed) perfective verb in Russian (but see Geist 2006: 80, and references therein, for the alternative hypothesis, i.e. that *bud-* is imperfective). Chvany (1975: 90) suggests that the acquired FUTURE meaning of *bud-* is compatible with the use of perfective verbs, that is, perfective verbs in the non-past tense are generally interpreted as referring to the FUTURE (in both Russian and Belarusian). Ferrell (1953), Chvany (1975), and Pettersson (1972) all maintain that in Russian *bud-* behaves like so-called ASPECTUALS (Freed 1979) or SUPER-LEXICAL (Smith 1991/1997) verbs such as *stat'* 'to become' and *načat'* 'to begin'. Like super-lexicals, for instance, *bud-* obligatorily takes a non-finite complement in the imperfective aspect in Russian, as example (93) illustrates. This pattern also holds in Belarusian (*bud-* is traditionally treated as a FUTURE auxiliary in examples like these):

- (93) Ja        budu    čitat'/                \*pročitat'    knigu.                (Russian)  
       I-NOM   will   to-read-IMPF/   \*to-read-PF   book-ACC  
       'I will read a/the book.'
- (94) Ja        budu    čytac'/                \*pračytac'    knigu.                (Belarusian)  
       I-NOM   will   to-read-IMPF/   \*to-read-PF   book-ACC  
       'I will read a/the book.'

If these scholars are correct, and *bud-* constitutes a perfective verb (in both Belarusian and Russian), then the preference for an instrumental Case-marked predicate with this copula is not unexpected. One of the functions of the perfective aspect in the Slavic languages is to focus on a change of state, which, as discussed in chapter 4, is also one of the environments for instrumental Case marking in depictive constructions. Recall the interpretation of the instrumental Case-marked adjective in the following depictive construction in Russian from chapter 4, for instance:

- (95) Ivan        vernulsja iz    bol'nicy    zdorovyj/        zdorovym.  
       Ivan-NOM   returned from hospital   healthy-NOM/   -INSTR  
       'Ivan returned from the hospital healthy (/cured-INSTR).'



Only the instrumental case-marked adjective in this example can be interpreted as ‘cured’, that is, as implying that Ivan’s healthy state is a change of state. The FUTURE TENSE copula *bud-* combined with a predicative adjective or noun typically indicates that some state will hold at some future point in time. Often this future state is interpreted as a change of state, for example a construction like Russian *Ja budu vračom* ‘I will be a doctor’ means that the speaker will become a doctor, that is, a change of state will occur at some point in the future. The strong link between a change of state interpretation, boundedness, and instrumental Case marking on a predicate, combined with the evidence that *bud-* constitutes a perfective verb which often signals that a change of state will occur at some future point in time, make it obvious why the instrumental Case is so preferred with the copula *bud-*.

These patterns all suggest that the instrumental–Case agreement alternation in copular constructions in both Belarusian and Russian is linked to a grammatical aspectual contrast. The following section outlines the basic syntactic structure I assume for copular constructions in the two languages and provides an analysis of the different Case-marking possibilities that arise in these constructions.<sup>31</sup>

**3.2.1 The syntax of Case in copular constructions in Belarusian and Russian** In much of the syntactic literature, it is generally assumed that the copula selects a small clause as its complement. Chvany (1975), working on Russian, first noticed the parallel behaviour between the complement of verbs like *ščitat’* ‘to consider’ and *vybrat’* ‘to elect’ and the complement of copular constructions. The claim that the copula selects a small clause complement in general, however, was popularized by Stowell’s (1978) influential article on English. Stowell claimed that in English constructions like (96), the syntagm following BE should be analysed as a proposition, namely the small clause [Bill silly].

<sup>31</sup> As with other non-finite verbs, the instrumental Case is obligatory on the predicate with non-finite BE. As mentioned in chapter 4, I follow Wurmbrand (2006, 2007) in the claim that non-finite verbs are TENSELESS. This means that there is no time-frame within which the eventuality described by the predicate could hold in copular constructions, i.e. the instrumental Case with non-finite BE is not linked to grammatical aspect. As mentioned in chapter 4, Geist (1999, 2006) also claims that the instrumental C/case with non-finite BE is not linked to semantic interpretation, but rather it is the only syntactic option available. In Geist 2006 she suggests that the nominative Case is ruled out in non-finite constructions because the predicate lacks an antecedent with which it can agree in Case. For her, either an antecedent is completely absent (e.g. in imperatives), or it is PRO, which she claims has no C/case feature. I leave open the possibility that PRO is caseless or absent in non-finite constructions and therefore nominative Case agreement is ruled out (but see Babby 1998a, and elsewhere, for the claim that PRO has a dative C/case feature in Russian). I assume that in non-finite BE constructions the instrumental case arises as the default case assigned to a predicate in the absence of any feature valuing, as discussed in chapter 4 and posited in Richardson 2003a.

(96) Bill<sub>i</sub> is[t<sub>i</sub>silly].

The small clause analysis of the complement of BE in Russian has been widely adopted in the syntactic literature (Harves 2002b; Ionin and Matushansky 2002; Matushansky 2000; and Pereltsvaig 2001, among others). I adopt this hypothesis without comment and extend it to the East Slavic languages in general.

In the spirit of Chvany (1975), I assume that the copula in Russian predicational constructions, and correspondingly in Belarusian, is not a lexical verb, but rather it is the morphological manifestation of a bundle of syntactic features, that is, it is the spell-out of different tense and grammatical aspect features. As is clear from the preceding discussion (see pp. 205–6) above, there is substantial evidence that *bud-* constitutes a perfective verb; thus, like perfective verbs in general in the Slavic languages, an AspP would be merged in a derivation with *bud-*. There is also evidence that some of the remaining members of the BE paradigm are imperfectives (Ferrell 1953; Geist 1999). Geist (1999), for instance, posits that *byt'* in Russian is imperfective, since, like imperfective verbs in general, it occurs after super-lexical verbs, as the following examples illustrate:

(97) On            perestal        čitat'/            \*pročitat'        knigu.  
he-NOM    stopped-PF    to-read-IMPF/    \*to-read-PF    book-ACC  
'He stopped reading a/the book.'

(98) On            perestal        byt'        studentom/        veselym.  
he-NOM    stopped-PF    to-be    student-INSTR/    happy-INSTR  
'He stopped being a student/happy.'

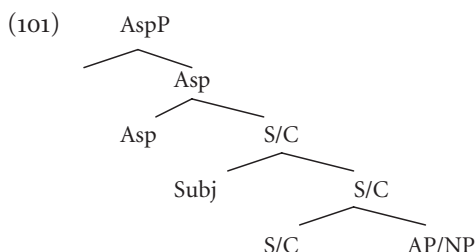
Example (97) illustrates that only an imperfective verb can occur with the super-lexical verb *perestat'* 'to stop'. The grammaticality of *byt'* after this same super-lexical verb in example (98) suggests that *byt'* too is an imperfective verb. These same patterns exist in Belarusian, as the following examples illustrate:

(99) Maksim    pačau        čytac'/            \*pračytac'        knigu.  
Maksim    began    to-read-IMPF/    \*to-read-PF    book  
'Maksim began to read a/the book.'

(100) Ja    pačau        byc'        razam        z        Vasilem    Bykavym    i  
I    began    to-be    together    with    Vasil'    Bykaŭ        and  
Aljakseem    Karpjukom...  
Aljaksej        Karpjuk...  
'I began to be together with Vasil' Bykaŭ and Aljaksej Karpjuk.'  
(Google)

Given the evidence that BE exhibits aspectual behaviour typical of imperfective and perfective verbs, it seems reasonable to assume it is the morphological manifestation of both tense and aspect features, that is, it consists of both a TP and an AspP.

Consider now the structure of the small clause complement of BE. Matushansky (2000) and Ionin and Matushansky (2002) posit a configuration along the lines of (101) below for the structure of the small clause complement in Russian copular constructions with instrumental Case marking (S/C stands for small clause):



According to Matushansky (2000), an AspP is generated above the small clause complement with instrumental Case-marked predicates only. The instrumental Case in turn is ‘checked’ (i.e. valued) by this functional category, and nominative Case agreement is blocked if this functional projection is present.<sup>32</sup> Matushansky motivates this structure with evidence from *wh*-movement patterns in Russian. She shows, for instance, that *wh*-movement of an instrumental Case-marked predicate is grammatical in the following examples, but movement of the predicate with Case agreement is not:

- (102) Kakim učitelem byl Makarenko?  
 what-INSTR teacher-INSTR was Makarenko  
 ‘What kind of a teacher was Makarenko?’

- (103) \*Kakoj učitel’ byl Makarenko?  
 what-NOM teacher-NOM was Makarenko  
 (intended interpretation) ‘What kind of a teacher was Makarenko.’  
 (Matushansky 2000: 290)

Matushansky also notes that for speakers who allow extraction from factives, only instrumental Case-marked predicates can be extracted, as illustrated in Bailyn and Rubin 1991:

<sup>32</sup> In Matushansky 2000 this AspP is not motivated by the aspectual interpretation of the predicate itself. In Ionin and Matushansky 2002, however, it is.

- (104) Ja znaju, što Saša byl muzykant/ muzykantom.  
 I know that Sasha-NOM was musician-NOM/ -INSTR  
 'I know that Sasha was a musician.'
- (105) Kem<sub>i</sub>/ \*Kto<sub>i</sub> ty znaeš', što Saša byl t<sub>i</sub>?  
 who-INSTR/ \*who-NOM you know that Sasha was

Matushansky posits that patterns like these suggest only the instrumental Case-marked predicate is dominated by an extra level of functional structure (an AspP) which provides an escape hatch for *wh*-movement.

I follow Matushansky (2000) in the claim that the structure under (101) is essentially correct for the small clause complement of copular constructions in Russian with instrumental Case marking, and that no AspP is present in the small clause complements with nominative Case marking. Furthermore, I assume that the small clause dominated by an AspP is not merged with the PRESENT TENSE copula for the reasons previously discussed. In essence, the structure of the small clause in Russian copular constructions therefore resembles that of depictive adjuncts in Russian: only an instrumental Case-marked predicate is dominated by an additional layer of structure (an AspP) in both depictive and copular constructions, hence the pattern that only predicates with instrumental Case marking can undergo *wh*-movement. I assume, as in depictive and predicative participle constructions, that the instrumental Case in Russian copular constructions is the morphological manifestation of a [+bounded] Asp and nominative Case agreement is valued via (the feature-sharing version of) Agree with the nominative Case-marked antecedent. As in depictives, in the absence of an AspP the nominative Case-marked predicate is interpreted as unbounded by default.

If small clause complements in Russian copular constructions pattern in a similar manner to depictive adjuncts, we would expect to see this pattern extend to Belarusian also. In chapter 4, I illustrated that depictives in Belarusian, unlike Russian, do not exhibit restrictions on *wh*-movement, that is, both predicates with instrumental Case marking and those with Case agreement can undergo *wh*-movement. The following examples, repeated from chapter 4, illustrate this pattern.

- (106) *Wh-extraction of depictive adjectives in Belarusian:*
- a. Jaki<sub>i</sub>/ Jakim<sub>i</sub> Maksim pryjšoŭ  
 what-state-NOM/ what-state-INSTR Maksim arrived  
 dadomu z špitalja t<sub>i</sub>?  
 home from hospital?  
 'In what state did Maksim arrive home from the hospital?'  
 (Possible answer: zdarovy-NOM/zdarovym-INSTR 'healthy'.)

- b. Jakoga<sub>i</sub>/                      Jakim<sub>i</sub>                      jany pryvjali    jago dadomu t<sub>i</sub>?  
       what-state-ACC/    what-state-INSTR    they brought him home?  
       ‘What state did they bring him home in?’  
       (Possible answer: Pjanaga-ACC/Pjany<sub>m</sub>-INSTR ‘drunk’.)

Notice that, like depictive secondary predicate constructions, *wh*-movement of predicates with both Case agreement and instrumental Case marking is also possible in Belarusian copular constructions (no speakers accepted long-distance *wh*-movement in constructions similar to 105 above for Russian):

- (107) Jaki                      student                      byŭ Janka?                      (Adkaz: Dobry.)  
       what-NOM    student-NOM    was Janka-NOM (Answer: good-NOM.)  
       ‘What kind of a student was Janka?’ (Answer: ‘A good one’.)
- (108) Jakim                      studentam                      byŭ Janka?                      (Adkaz: Dobrym.)  
       what-INSTR    student-INSTR    was Janka-NOM (Answer: Good-INSTR.)  
       ‘What kind of a student was Janka?’ (Answer: ‘A good one’.)

These examples suggest that the small clause complement in copular constructions in Belarusian behaves in a parallel manner to depictive secondary predicates, that is, all predicates are dominated by an AspP, regardless of their Case marking. As expected, a [+bounded] Asp results in instrumental Case marking on the predicate in Belarusian, whereas, as in depictives, there is no morphological manifestation of a [–bounded] Asp. Instead, the nominative Case (agreement) is valued via Agree, as in depictives.

### 3.3 *The copula in Ukrainian*

As already discussed, Ukrainian, like Belarusian and Russian, also exhibits an instrumental versus Case agreement opposition in its predication copular constructions. Unlike Belarusian and Russian, however, it has a predication construction with an unchanging present tense/PRESENT TENSE form *je*, which can merge with an instrumental Case-marked predicate, and it has a predication pronominal copular construction in which the instrumental Case is ungrammatical, despite the presence of a past tense form of BE or *bud-*. In the following section I address the status of the *je* + INSTR construction in Ukrainian and suggest that this fixed form is a lexical item, equivalent to *javl’jat’sja* ‘to be’ in Russian. In section 3.3.2 I show that the same aspectual distinctions evident in non-pronominal predication copulas in Belarusian and Russian also hold in Ukrainian, and in section 3.3.3 I focus on the nature of the pronominal copula and compare this construction with a similar construction in Polish. I shall suggest that there is one BE in all predication copular constructions in Ukrainian and that the difference between these

constructions lies in the different kinds of small clause complements BE can select.

3.3.1 *The je + INSTR construction* In section 3.2 above, I suggested that the instrumental Case is ungrammatical on the predicate with the PRESENT TENSE zero copula in Belarusian and Russian because it is pragmatically infelicitous to refer to the endpoint of an eventuality in the present tense (Smith 1991/1997). The following construction in Ukrainian would seem to undermine this claim:

- (109) Maksym je (?)učytel'/ učytelem.  
 Maksym-NOM is (?)teacher-NOM/ -INSTR  
 'Maksym is a teacher.'

This construction has what appears to be a PRESENT TENSE copula, yet the predicate (*učytelem* 'teacher') can occur in the instrumental C/case. It is important to note from the outset that some speakers find the *je* + INSTR construction bookish, formal, and/or unnatural in predicationals, particularly in the contemporary spoken language. Some speakers also accept the nominative Case after *je* and some use *je* + NOM interchangeably with *je* + INSTR, although there was a considerable degree of variation among speakers as to whether the *je* + NOM construction was natural. The *je* form is unchanging: it does not conjugate for person, number, or tense. Notice, for instance, that *je* remains constant even if the predicate is in the plural, for example:

- (110) Studenty je peremožcjamy.  
 students-NOM.PL is winners  
 '(The) students are (the) winners.'

We know that *je* does not have different tense forms from its behaviour with adjectival predicates. Notice, for instance, that an adjectival predicate in the *je* construction is generally marginal for most speakers, as example (111) below illustrates. In the zero copular construction, on the contrary, an adjectival predicate is perfectly acceptable (example 112):

- (111) ?Slony je velykymy.  
 elephants-NOM is big-INSTR  
 'Elephants are big.'
- (112) Slony velyki.  
 elephants-NOM big-NOM  
 'Elephants are big.'

Adjectival predicates are perfectly grammatical with the past tense copula and the *bud-* copula, as examples (113) and (114) illustrate:

- (113) Vony           buly           pjanymy.  
           they-NOM   were-PL   drunk-INSTR  
           ‘They were drunk.’
- (114) Vony           budut’       pjanymy.  
           they-NOM   will-be-PL   drunk-INSTR  
           ‘They will be drunk.’

The different distribution of adjectival predicates in the *je* construction versus the zero copular construction suggests that the past tense copula and the *bud-* copula constitute the spell-out of tense and aspect features related to the zero copula, not the *je* + INSTR construction.

A construction with *je* does not differ in meaning from one with a zero copula; that is the following constructions are semantically identical:

- (115) Maksym           je   likarem.  
           Maksym-NOM   is   doctor-INSTR  
           ‘Maksym is a doctor.’
- (116) Maksym —       likar.  
           Maksym-NOM   doctor-NOM  
           ‘Maksym is a doctor.’

Like predication constructions in general in the East Slavic languages, the instrumental Case is ungrammatical on the referential argument in the *je* construction (for discussion of this pattern in Russian, see Peškovskij 1938 and Galkina-Fedoruk et al. 1958); that is, the following examples are ungrammatical (this does not mean, however, that the predicate obligatorily occurs in the instrumental Case in all predication constructions, as illustrated above, and as Geist (2006, forthcoming) demonstrates for Russian):<sup>33</sup>

- (117) \*Maksymom       je   likar.  
           Maksym-INSTR   is   doctor-NOM  
           (intended interpretation) ‘Maksym is a doctor.’
- (118) \*Stolycja       Ukrajiny   je   Kyjevom.  
           capital-NOM   Ukraine   is   Kiev-INSTR  
           (intended interpretation) ‘The capital of Ukraine is Kiev.’

<sup>33</sup> The *je* construction is also possible in specificationals.

In effect, the behaviour of the *je* + INSTR construction is strikingly similar to the behaviour of the verb *javljat'sja* 'to be' in Russian. The verb *javljat'sja*, like the *je* construction, takes a predicate complement in the instrumental C/case, adjectival complements are not as widely accepted as nominal ones, and constructions with *javljat'sja* are considered bookish, formal, and/or unnatural in the spoken language. The following examples illustrate these patterns with the verb *javljat'sja* in Russian:

- (119) Maksim                javljaetsja    studentom.                                (predicational)  
       Maksim-NOM    is                student-INSTR
- (120) \*Maksimom        javljaetsja    student.                                (INSTR on <e>)  
       Maksim-INSTR    is                student-NOM
- (121) ?Slony                javljajutsja    velikimi.                                (AP predicate)  
       elephants-NOM    are                big-INSTR

In fact, some bilingual Ukrainian-Russian speakers claimed (unprompted) that the *je* construction in Ukrainian is equivalent to the use of *javljat'sja* in Russian for them. The only difference between *je* and *javljat'sja* in the two languages is that *je* is a fixed unchanging lexical item, whereas *javljat'sja* conjugates and has tense morphology.

Interestingly, Belarusian had a similar construction to the Ukrainian *je* construction in predicationals, namely the unchanging lexical item *josc* 'be'. None of my native informants accepted this construction in the contemporary language. They claimed instead that it had been replaced by the verb *zjaŭljacca* 'to be', the Belarusian equivalent of *javljat'sja* in Russian.

Thus, I assume that *je* in Ukrainian, like *javljat'sja* in Russian is a lexical element—not the spell-out of tense and aspect features—and the instrumental C/case that arises on its complement, like the instrumental C/case with *javljat'sja*, has nothing to do with grammatical aspect, but rather it is the predicate instrumental assigned within the small clause complement of these verbs (as discussed in chapter 2, Section 3.3).<sup>34</sup> I also assume that the *je* + NOM construction is the result of analogy (for those speakers who accept it). That is, either *je* is now possible for some speakers in the zero copular construction, and the nominative Case arises as expected, or the instrumental is being replaced by the nominative by analogy with nominative Case marking in PRESENT TENSE copular constructions in general.

<sup>34</sup> See Pereltsvaig (2001) for the claim that copula-like verbs such as *javljat'sja* are lexical heads in Russian.



3.3.2 *The zero, past, and bud- copula* Once we remove the *je* + INSTR construction from consideration, it becomes clear that (non-pronominal) predication copular constructions in Ukrainian behave in exactly the same manner as those in Belarusian and Russian. That is, the instrumental Case is ungrammatical in the PRESENT TENSE (the zero-copular construction), it is generally preferred with the FUTURE TENSE *bud-* copula, and a Case-marking dichotomy exists with the past tense copula. As expected, these patterns are also related to grammatical aspect. In the following examples, for instance, speakers claimed that the instrumental Case-marked predicates focused on the status of the eventuality described by the predicate at a particular point in time, whereas the predicates with Case agreement did not, instead they had a more general qualitative or descriptive interpretation:

- (122) Misto            bulo    velyke/            velykym.  
town-NOM    was    big-NOM/    -INSTR  
'The town was big.'
- (123) Maksym            buv    student/            studentom.  
Maksym-NOM    was    student-NOM/    -INSTR  
'Maksym was a student.'
- (124) Maksym            buv    pjanyj/            pjanym.  
Maksym-NOM    was    drunk-NOM/    -INSTR  
'Maksym was drunk.'

As in the Russian example discussed above, the predicate with instrumental Case marking in example (122) describes the state of the city at a particular point in time and implies that the city used to be big, but that now it is small or smaller; that is, it focuses on a time before some change occurred. The predicate with instrumental Case marking in example (123) focuses on the fact that at some point in Maksym's life, he was a student, but he no longer is, whereas the predicate with Case agreement simply states that Maksym was a student, without entailing any sort of change. Similarly, in example (124) speakers claimed that the instrumental predicate implied that Maksym was drunk at a particular point in time, whereas the predicate with Case agreement implied that he is always or often drunk, that is, his drunken state is not contained within a particular time-frame. In all of these examples only the predicate with instrumental Case marking implies that the eventuality described by the predicate held at a particular point in time—the Topic Time. Thus, only an instrumental Case-marked predicate is bounded.

As expected, once we explicitly bound an eventuality in time by adding the 'for X time' adverbial to a construction, Case agreement becomes ungrammat-

ical or marginal on the predicates in Ukrainian, just as it does in Belarusian and Russian, as the following examples illustrate:

- (125) Vona byla blondynkoju/ \*blondynka 2 roky.  
 she-NOM was blonde-INSTR/ \*-NOM 2 years  
 'She was a blonde for two years.'
- (126) Maksym buv pjanyj/ ??/\* pjanyj 40 xvylyn.  
 Maksym-NOM was drunk-INSTR/ ??/\*-NOM 40 minutes  
 'Maksym was drunk for forty minutes.'

Furthermore, as in Belarusian and Russian, Case agreement is ungrammatical with the (bounded) perfective copula *po-butj* in Ukrainian:

- (127) Maksym pobuv dyrektorem/ \*dyrektor.  
 Maksym-NOM was-PF director-INSTR/ \*-NOM  
 'Maksym was a/the director for a while.'

These examples support the hypothesis that instrumental Case-marked predicates in Ukrainian denote that the eventuality described by the predicate is bounded in time. As expected, therefore, this bounded predicate is ungrammatical in the PRESENT TENSE, but generally preferred with the (perfective) future *bud-*, just as in Belarusian and Russian (*bud-* exhibits the same behaviour in Ukrainian as it does in Belarusian and Russian).

Recall from chapter 4 that Ukrainian and Belarusian pattern together in terms of the structure of their depictive secondary predicates, that is, all depictives are dominated by an additional layer of functional structure (an AspP), since in both languages a predicate with either instrumental Case marking or Case agreement can undergo *wh*-movement. Given the parallel behaviour of *wh*-movement in depictive and copular constructions in both Belarusian and Russian illustrated in section 3.2.1 above, we would expect Ukrainian copular constructions also to pattern together with depictives, namely, to allow *wh*-movement of the predicate, regardless of its Case marking. This prediction is borne out, as the following examples illustrate:

- (128) *Wh-movement in depictives:*
- a. Jakyj<sub>i</sub>/ Jakym<sub>i</sub> Borys pryjšov  
 what-state-NOM/ what-state-INSTR Borys-NOM arrived  
 dodomu z likarni t<sub>i</sub>?  
 home from hospital  
 'In what state did Borys arrive home from hospital?'  
 (Possible answer: zdorovyj-NOM/zdorovym-INSTR 'healthy').

- b. Jakogo<sub>i</sub>/                      Jakym<sub>i</sub>                      milicija                      pryvela  
       what-state-ACC/    what-state-INSTR    police-NOM    brought  
       jogo                      dodomu t<sub>i</sub>?  
       him-ACC    home  
       ‘In what state did the police bring him home?’  
       (Possible answer: Pjanogo-ACC/Pjanyim-INSTR ‘drunk’.)

(129) *Wh-movement in copular constructions:*

- [Jakyj student/                      Jakym studentom]<sub>i</sub>    buv    Maksym t<sub>i</sub>?  
       what student-NOM/    -INSTR                      was    Maksym-NOM  
       ‘What kind of a student was Maksym?’

These examples suggest that Belarusian and Ukrainian pattern together in terms of the syntax of both their depictive and their copular constructions. I therefore assume that the syntax of Case and aspect outlined above for Belarusian also holds true for Ukrainian copular constructions: all small clause complements are dominated by an additional layer of functional structure (an AspP), and the instrumental Case is the morphological manifestation of a [+bounded] Asp, whereas Case agreement arises via (the feature-sharing version of) Agree.

As already mentioned, Ukrainian has one more predication copular construction absent in Belarusian and Russian, namely the pronominal copula. The following section addresses the structure and nature of Case marking in this construction.

3.3.3 *The pronominal copula in Ukrainian* As previously discussed, in all the East Slavic languages a pronominal copular construction arises in equatives. Ukrainian differs from Belarusian and Russian, however, by also having a pronominal copula in predicational (and specificational) constructions, as examples (130) and (131) below illustrate for predicationals and equatives.

- (130) Maksym —                      ce/to    naš    drug.                      (predicational)  
       Maksym-NOM    this    our    friend-NOM  
       ‘Maksym is our friend.’
- (131) Doktor Žekill —                      ce/to    mister    Xajd.                      (equative)  
       doctor    Jekyll-NOM    this    mister    Hyde-NOM  
       ‘Doctor Jekyll is Mister Hyde.’

The pronominal elements in these constructions are fixed, that is, they do not exhibit any agreement morphology. Furthermore, the neuter form of the pronoun ‘that’ is *te*, not *to*; thus, *to* in these examples is used purely to indicate predicativity (Shevelov 1993: 979–80). For some speakers (although

not all) the pronominal copula can be combined with a form of the copula BE, a pattern I refer to as the DUAL COPULA construction, following Citko's (2006a, 2006b) use of this term for similar constructions in Polish. The following examples illustrate this pattern (for some speakers):

- (132) Maksym — ce/to je/buv/bude naš drug. (predicational)  
 Maksym-NOM this is/was/will-be our friend-NOM  
 'Maksym is/was/will be our friend.'
- (133) Mister Xajd — ce/to je/buv/bude doktor Žekill. (equative)  
 Mister Hyde-NOM this is/was/will-be doctor Jekyll  
 'Mister Hyde is/was/will be Doctor Jekyll.'

The order of the pronominal copula and BE cannot be reversed in these constructions, thus the following construction is ungrammatical.

- (134) \*Maksym — je/buv/bude ce/to naš drug.  
 Maksym-NOM is/was/will-be this our friend-NOM

As already mentioned, there is no Case-marking alternation in dual pronominal copular constructions. The nominative Case is obligatory in these constructions; that is, instrumental Case marking is ungrammatical even in the predicational construction, despite the presence of past tense BE (*buв-*) or FUTURE *bud-*, for example:<sup>35</sup>

- (135) \*Maksym — ce/to je/buv/bude našym drugom.  
 Maksym-NOM this is/was/will-be our friend-INTR

The ungrammaticality of the instrumental Case in the pronominal predicational constructions sets them apart from other predicational copular constructions in the East Slavic languages, in which the instrumental Case is possible with past tense BE and indeed preferred with *bud-*. In what follows, I will suggest that the difference between pronominal constructions (including the dual copula) versus non-pronominal copular constructions lies in the ability of BE to merge with different types of small clause complements in Ukrainian.

<sup>35</sup> The *ce/to* construction in Ukrainian is not equivalent to constructions like (i) below in colloquial French which contain a dislocated pronoun.

i. Paris c'est intéressant.  
 Paris it-is interesting  
 'Paris, it's interesting.'

If the pronominal copular were a dislocation structure, we would expect instrumental case marking to be possible on the predicate, contrary to fact, since the instrumental case is possible when the copula BE is overt in the past and FUTURE.

Ukrainian is not the only Slavic language to have pronominal, dual, and non-pronominal copular constructions in predicational and equative constructions; this phenomenon also exists in Polish, as illustrated in Citko 2006a, 2006b. The following examples illustrate pronominal and dual copular constructions in predicational and equative constructions in Polish (all the Polish examples in the following discussion are taken from Citko 2006a, 2006b):<sup>36</sup>

(136) *The pronominal copula in Polish:*

- a. Jan to mój najlepszy przyjaciel. (predicational)  
 Jan-NOM this my best friend-NOM  
 'Jan is my best friend.'
- b. Doktor Jekyll to Mr Hyde. (equative)  
 Doktor Jekyll-NOM this Mr Hyde-NOM  
 'Doktor Jekyll is Mr Hyde.'

(137) *The dual copula in Polish:*

- a. Jan to jest (/był/będzie) mój (predicational)  
 Jan-NOM this is (/was/will-be) my  
 najlepszy przyjaciel.  
 best friend-NOM  
 'Jan is/was/will be my best friend.'
- b. Doktor Jekyll to jest Mr Hyde. (equative)  
 Doktor Jekyll this is Mr Hyde  
 'Doctor Jekyll is Mr Hyde.'

In what follows, I shall illustrate that many of the restrictions that hold for pronominal and dual copular constructions in Polish, as identified by Citko (2006a, 2006b), also hold in Ukrainian.

Citko (2006a) identifies the following three conditions characteristic of both pronominal and dual copular constructions in Polish:<sup>37</sup>

(138) *Conditions on the Polish pronominal and dual copula:*

- a. both constructions are only compatible with nominal predicates;
- b. only the nominative Case is possible;
- c. no *wh*-extraction is allowed.

<sup>36</sup> See Citko (2006a) for convincing evidence that *to* in Polish also constitutes a predicative element.

<sup>37</sup> One further condition she posits for these constructions in Polish is a Stage-level restriction, i.e. she claims that S-level NPs are infelicitous in these constructions in Polish. This condition does not seem to hold (at least not robustly) in Ukrainian.

The following examples illustrate that these three conditions hold in both Polish and Ukrainian. Consider first condition (a) in both languages, illustrated under (139) and (140) below.

(139) *Condition (a) in Polish (only nominal predicates are licit):*

- a. Jan to (jest/był/będzie) [mój najlepszy przyjaciel]<sub>NP</sub>  
 Jan-NOM this (is/was/will-be) my best friend-NOM  
 'Jan is/was/will-be my best friend.'
- b. \*Jan to (jest/był/będzie) [przyjacielski]<sub>AP</sub>  
 Jan-NOM this (is/was/will-be) friendly  
 (intended interpretation) 'Jan is/was/will be friendly.'
- c. \*Jan to (jest/był/będzie) [w przyjacielskim  
 Jan-NOM this (is/was/will-be) in friendly  
 nastroju]<sub>PP</sub>  
 mood  
 (intended interpretation) 'Jan is/was/will be in a friendly mood.'

(140) *Condition (a) in Ukrainian (only nominal predicates are licit):*

- a. Ira — ce/to (je/bula/bude) [moja najkращa podругa]<sub>NP</sub>  
 Ira-NOM this (is/was/will-be) my best friend-NOM  
 'Ira is/was/will be my best friend.'
- b. \*Slony — ce/to (je/buly/budut') [velyki]<sub>AP</sub>  
 elephants-NOM this (is/was/will-be) big-NOM  
 (intended interpretation) 'The elephants are/were/will be big.'
- c. \*Svitlana — ce/to (je/bula/bude) [u brata/ z  
 Svitlana this (is/was/will-be) at brother/ from  
 Kyjeva]<sub>PP</sub>  
 Kiev  
 (intended interpretation) 'Svitlana is/was/will be at her  
 brother's/ from Kiev.'

These examples show that only NP complements are possible in both pronominal and dual copular constructions in the two languages: AP and PP predicates are ungrammatical. This condition does not hold for non-pronominal copular constructions in either Polish or Ukrainian, as the examples under (141)–(144) illustrate.<sup>38</sup>

<sup>38</sup> In Polish the NP complement obligatorily occurs in the nominative Case in non-pronominal copular constructions, whereas the AP complement occurs in the instrumental. See Bailyn and Citko (1999) for some discussion of this phenomenon.

- [illegible]

Notice that, unlike pronominal copular constructions, AP and PP complements are possible in non-pronominal copulas in both Polish and Ukrainian.

The examples under (145) and (146) below illustrate that condition (b) also holds for pronominal and dual copula constructions in both Polish and Ukrainian:

- (145) *Condition (b) in Polish (only the nominative Case is possible):*
- a. Gwiazda poranna to (jest) gwiazda wieczorna.  
 star-NOM morning-NOM that (is) star-NOM evening-NOM  
 ‘The morning star is the evening star.’
- b. \*Gwiazda poranna to (jest) gwiazdę/ gwiazdą/  
 star-NOM morning-NOM that (is) star-ACC/ -INSTR/  
 gwiazdy wieczorną.  
 -GEN evening
- (146) *Condition (b) in Ukrainian (only the nominative Case is possible):*
- a. Jabluko — ce/to (je) frukt/ \*frukta/ \*fruktu/ \*fruktom.  
 Apple-NOM this (is) fruit-NOM/ \*-GEN/ \*-DAT/ \*-INSTR  
 ‘An apple is a fruit.’
- b. Maksym — ce/to (je/buv/bude) naš drug/  
 Maksym-NOM this (is/was/will-be) our friend-NOM/  
 \*našym drugom/ \*našogo druga/\*našomu drugovi.  
 \*-INSTR /\*-GEN/ /\*-DAT  
 ‘Maksym is/was/will be our friend.’

The Case-marking patterns illustrated in these examples differ significantly from the distribution of Case in non-pronominal copulas in the two languages. In Polish verbal copular constructions the instrumental Case is obligatory on NP complements, and in Ukrainian, there is an opposition between nominative and instrumental Case in predicationals, as already discussed in detail.

Consider finally condition (c) in both languages, namely the prohibition on *wh*-movement in pronominal and dual copular constructions. The following examples illustrate that this condition also holds in both Polish and Ukrainian.

- (147) \*Co<sub>i</sub> fizyka to t<sub>i</sub>? (Polish)  
 what-NOM physics-NOM this  
 (intended interpretation) 'What is physics?'  
 (148) \*Co<sub>i</sub> fizyka to jest t<sub>i</sub>?  
 what-NOM physics-NOM this is  
 (intended interpretation) 'What is physics?'  
 (149) \*Ščo<sub>i</sub> jabluko ce/to t<sub>i</sub>? (Ukrainian)  
 What-NOM apple-NOM this  
 (intended interpretation) 'What is an apple?'  
 (150) \*Ščo<sub>i</sub> L'viv to/ce bude t<sub>i</sub>?  
 what-NOM L'viv-NOM this will-be  
 (intended interpretation) 'What will L'viv be?' (Possible answer:  
 'The capital of Ukraine')

This restriction does not hold in non-pronominal copular constructions in Ukrainian, as illustrated below. It also does not hold in non-pronominal copular constructions in Polish:

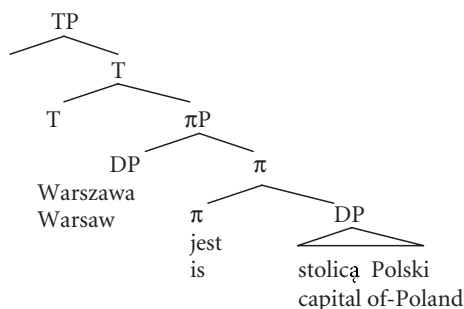
- (151) Kim<sub>i</sub> Jan jest t<sub>i</sub>? (Polish)  
 who-INSTR Jan-NOM is  
 'Who is Jan?'  
 (152) Čym<sub>i</sub> L'viv bude t<sub>i</sub>? (Ukrainian)  
 what-INSTR L'viv will-be  
 'What will L'viv be?'  
 (153) [Jakyj student]<sub>i</sub> buv Maksym t<sub>i</sub>?  
 what-NOM student-NOM was Maksym-NOM  
 'What kind of a student was Maksym?'



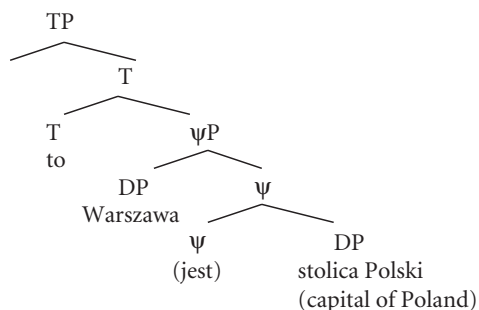
Thus, these examples show that Polish and Ukrainian exhibit parallel behaviour in the distribution of their pronominal and dual copular constructions. In the following section I address the syntax of these constructions.

3.3.4 *The syntax of the pronominal and dual copular constructions* My assumptions about the structure of pronominal and dual copular constructions are reasonably straightforward. In the spirit of Citko's (2006a) analysis of pronominal, dual, and non-pronominal copular constructions in Polish, I assume that there is one BE in all three types of constructions, but that this BE can merge with different small clause complements. I have suggested in section 3.3.1 that all non-pronominal copular constructions in Ukrainian (and Belarusian in section 3.2.1) select a small clause complement dominated by an aspectual phrase. This hypothesis was supported by the clear link between grammatical aspect and the nominative instrumental Case-marking dichotomy in these constructions and by *wh*-movement facts. Citko does not posit a small clause headed by an aspectual phrase in non-pronominal copular constructions in Polish, which would be unmotivated given the absence of a link between aspect and Case-marking patterns in Polish copular constructions.<sup>39</sup> Instead, she suggests that the small clause itself consists of a functional category in non-pronominal constructions in Polish, but she leaves the exact nature of this functional category open, positing a  $\pi P$  phrase for descriptive purposes. She posits that the small clause complement in pronominal copular constructions also consists of a functional projection, but that this projection must be of a different nature. She labels the functional category in pronominal and dual copular constructions  $\psi P$  (again, for descriptive purposes). The following configurations illustrate the two small clause structures she posits for Polish.

(154) *Non-pronominal copulas:*



<sup>39</sup> That the small clause complement in Polish non-pronominal copular constructions does not merge with an AspP should not strike us as surprising, given that functional categories are parameterized across different languages (Thráinsson 1996).

(155) *Pronominal copulas:*

I assume that we can essentially adopt a similar structure to (155) for Ukrainian pronominal and dual copular constructions, given the largely parallel behaviour of the pronominal and dual copula in these two languages. I assume, however, that BE could be spelled out in an AspP dominating the small clause, since BE itself consists of both a TP and an AspP in the East Slavic languages.<sup>40</sup> This hypothesis enables us to maintain the generalization that small clauses are devoid of any tense, since it removes a tensed copular element from the small clause complement.

Thus, in non-pronominal constructions in Ukrainian the small clause complement is dominated by an AspP (associated with the small clause not the copula), whereas in pronominal ones it is not. In the absence of an AspP in Ukrainian pronominal copular constructions, nominative Case agreement arises via Agree, there is no Case-marking opposition linked to semantic interpretation, and *wh*-movement is ungrammatical. This difference between pronominal and non-pronominal constructions, however, is not enough to account for the restriction that only NP complements are licit with the pronominal copula. I therefore also follow Citko (2006) in the claim that the functional structure of the small clause itself must differ in the non-pronominal and pronominal copular constructions in Polish and correspondingly in Ukrainian, hence the two types of functional structure in their configurations under (154) and (155) above. Citko posits that the head of the small clause in a configuration like (155) above differs from (154) in that it requires syntactic symmetry and in this sense it is reminiscent of the head of a coordinate structure (Johannessen 1998; Munn 1993; Zoerner 1995). She states that this symmetry requirement is manifested in the following three ways:

<sup>40</sup> The copular *bud-* in Ukrainian behaves like a perfective verb and *buty* behaves like an imperative verb in that it may follow super-lexical verbs, just as in Belarusian and Russian.

- (i) The  $\psi$  head requires its complement to be of the same category as its specifier (i.e. an NP). This requirement has a parallel in the coordination domain, i.e. the Coordination of Likes Constraint;
- (ii) The head  $\psi$  requires identity in *C/case* between its specifier and complement. This follows from the assumption that  $\psi$  does not have any *C/case* assignment capabilities of its own. Again, as noted by Citko, this pattern is similar to the *C/case* assignment properties of the coordinate head, namely neither can assign *C/case* on its own and both require the specifier and complement to bear the same *C/case*;
- (iii)  $\psi$ P disallows *wh*-movement because it lacks an extra EPP feature. This pattern also has an analogue in the coordinate domain in the form of the Coordinate Structure Constraint.

Thus, in the spirit of Citko's analysis of Polish, I also assume that the core of the small clause in pronominal copular constructions in Ukrainian differs from the core of the small clause in non-pronominal copular constructions.<sup>41</sup> That is, there is one *BE* in all predicational constructions in Ukrainian, but this *BE* can merge with a number of different types of small clause complements, one of which (the pronominal copula) is absent in Belarusian and Russian predicational constructions.

#### 4. Conclusion

The goal of this chapter was to link together the Case-marking patterns in a variety of different predicate constructions in the East Slavic languages and to demonstrate that these patterns are intimately connected to grammatical aspect. Throughout this chapter, I have demonstrated that the different interpretation of predicates with instrumental Case marking versus those with Case agreement in predicative participles in Russian and copular constructions in all the East Slavic languages mirror the patterns discussed for depictive secondary predicate constructions in chapter 4, namely, the instrumental–Case agreement dichotomy encodes a grammatical aspectual

<sup>41</sup> Citko uses the behaviour of the dual pronominal construction in Polish to argue against the existence of so-called *BARE* small clause complements, like (81) (see p. 200). Citko claims that the bare small clause hypothesis does not provide a location for both the pronominal and the verbal copula. She does not, however, entertain the idea that an aspectual phrase, linked to the copula, might dominate the small clause and thus provide an additional location for the verbal copula. As mentioned (see pp. 199–200), I follow Pereltsvaig (2001) in the claim that a bare small clause structure can potentially account for the different interpretation and behaviour of equatives in Russian (and correspondingly in Belarusian and Ukrainian). A TP and an AspP (associated with the copula) dominating the small clause would provide locations for both the pronominal element and *BE* in pronominal copular constructions in Ukrainian.

contrast. In particular, only instrumental Case-marked predicates describe eventualities that are bounded in time. These patterns suggest that the instrumental Case is much more than simply a predicate C/case in the East Slavic languages (contra Bailyn and Rubin 1991, and Bailyn 1995a, 2001). They also provide support for Dickey's (2000, 2005) claim that the Slavic languages can be divided into two groups based on their treatment of grammatical aspect: eastern and western groups. That is, the East Slavic languages are unique among the Slavic languages in their use of Case morphology to manifest grammatical aspectual contrasts in predicate constructions; thus, they support Dickey's division of the Slavic languages according to an aspectual parameter.

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## Concluding Remarks

The role of Case in syntax is arguably one of the most controversial topics in syntactic theory. Many of the hypotheses that have been put forward to account for the syntax of Case in language are riddled with problems. In the Agree account of feature valuing posited in Chomsky 2000, for instance, Case features are problematic in that they do not behave like other features in the grammar, that is, unlike other features they are considered to be the ‘uninterpretable feature *par excellence*’ (Chomsky 1995: 278–9), meaning that they are not ‘paired’ with anything meaningful in the syntax. My goal in this book was to demonstrate that a number of C/case-marking patterns across the Slavic languages are intimately connected to aspectual features. My account eliminated the problematic ‘pure’ uninterpretable feature thought by many to characterize structural Case in the syntax. It also removed the obligatory probe–goal relationship thought by many to characterize Case valuing (although a direct relationship between a functional category and a Case-marked element could still exist). I suggested that certain structural Cases in the Slavic languages are directly linked to the featural composition of distinct functional categories in the syntax. I posited that the accusative Case on an internal argument, for instance, is linked to the status of *v* as [quantized], a feature which signals that the event structure of a ‘base’ verb is compositional. I maintained that the accusative Case on an internal argument is the morphological manifestation (spell-out) of aspectual Agree within *v*P, that is, it is intimately connected to the syntax of event structure alternations, even when it is not directly involved in these alternations. I also suggested that the instrumental Case in depictive, predicative participle, and copular constructions in the East Slavic languages is the morphological manifestation of the presence of a grammatical aspectual phrase with a [+bounded] feature in the syntax.

The hypothesis that the accusative Case is linked to the status of a base verb (*v*) as [quantized] enabled us to capture syntactically the pattern that the accusative Case is ‘aspectually relevant’ in Belarusian, Russian, Ukrainian, Czech, Slovak, Polish, and Bosnian/Croatian/Serbian. This hypothesis also

predicted that lexical case-marked arguments never occur with a [quantized] *v* in these languages, a prediction that was borne out (for two-place predicates and 'bare' lexical case-marked arguments). That is, I demonstrated that lexical case-assigning (two-place) base verbs are atelic and their event structure is never compositional. Linking the accusative Case on an internal argument to event structure facts also meant that it became possible to link the accusative to readily observable patterns in the grammars of the Slavic languages, unlike hypotheses that link the accusative Case to features like object phi-features. It also became possible to capture the insight in previous literature that accusative Case-marked arguments interact with event structure facts, without narrowly restricting this interaction to features like telicity, or boundedness and the role of an argument as a 'situation delimiter'.

Linking the instrumental–Case agreement opposition in a number of predicate constructions in the East Slavic languages to a grammatical aspect contrast enabled us to subsume previous descriptions of the semantics associated with this contrast under one general pattern—that is, claims like an instrumental Case-marked predicate denotes a more temporary (Jakobson 1936/1971), accidental (Wierzbicka 1980), or non-exhaustive (Potebnja 1888/1958) eventuality, or that it is linked to a topic situation contrasted with another (Geist 2006). All of these interpretations fall out naturally from a grammatical aspect contrast, namely an instrumental Case-marked predicate is bounded in time; it is a totality that can be qualitatively different from prior and/or subsequent eventualities (cf. Dickey 2000 on the perfective aspect). The patterns illustrated in chapters 4 and 5 also highlighted the fact that the instrumental Case on a predicate in the East Slavic languages is much more than a so-called 'predicate case'. In fact, in chapter 5 I demonstrated that the notion that the instrumental Case is always a predicate Case in Russian (cf. Bailyn and Rubin 1991, and Bailyn 1995a, 2001) becomes highly problematic once we explore the distribution of the instrumental in a closely related language like Ukrainian. Ukrainian, for instance, has predication constructions (the dual copula) in which the instrumental Case is ungrammatical on a predicate.

It remains to be seen whether linking structural Case-marking patterns to the unique featural composition of various functional categories can account for the links between morphological C/case and features like tense and aspect cross-linguistically. It is hoped that with a growing interest in the links between morphological C/case and features like tense and aspect in language, many of our syntactic mechanisms will be better understood, fine-tuned, and improved.

## Appendix: Lexical case-assigning base verbs in the Slavic languages

The following base verbs are in imperfective–perfective pairs. If a verb is unpaired, it is in the imperfective aspect, unless otherwise noted. The verbs have been taken from a variety of grammars, and all of their prefixation possibilities have been checked in reverse dictionaries (Russian, Ukrainian, Polish, BCS), or Academy Dictionaries (Belarusian, Czech, Slovak). All the different prefixation possibilities with a given verb are not listed in this appendix due to the discrepancies among native speakers regarding the distribution of various prefixes in a given language. All of the ‘reflexive’ S- verbs are *reflexiva tantum* verbs or they differ significantly in meaning from their non-reflexive ‘counterparts’. See chapter 2, section 3 for discussion of the status of the so-called dative indirect objects and non-lexical case-marked instrumental arguments listed below. The dative indirect object and non-lexical instrumental case-marking sections are intended to be illustrative, not exhaustive (and are not included for all languages).

### Belarusian

The following verbs are taken for the most part from Arašonkava and Lemcjugova 1991. All prefixation possibilities were checked in the Belarusian Academy Dictionary (Atraxovič 1977–1984).

### Genitive

|                       |                                                        |
|-----------------------|--------------------------------------------------------|
| <i>apasacca</i>       | ‘to fear, beware (of)’                                 |
| <i>bajacca</i>        | ‘to fear’                                              |
| <i>vyračysja</i> (pf) | ‘to renounce, disavow’ <sup>1</sup>                    |
| <i>zračysja</i> (pf)  | ‘to take back (e.g. one’s words)’                      |
| <i>žadac’</i>         | ‘to wish’ (3-place predicate, + GEN + inherent<br>DAT) |
| <i>pragnuc’</i>       | ‘to crave’                                             |
| <i>saromecca</i>      | ‘to be ashamed, embarrassed’                           |
| <i>tyčycca</i>        | ‘to touch, concern, relate to’                         |

<sup>1</sup> This verb was not possible with the ‘in X time’ adverbial for the overwhelming majority of speakers (only one speaker claimed it was possible).

## Dative

|                             |                              |
|-----------------------------|------------------------------|
| <i>apaniravac'</i>          | 'to oppose'                  |
| <i>gadzíc'</i>              | 'to please, oblige'          |
| <i>dapjakac'/dapjačy</i>    | 'to annoy, vex'              |
| <i>zajzdrosic'/pa~</i>      | 'to envy'                    |
| <i>zdradžvac'/zdradzić'</i> | 'to be unfaithful to/betray' |
| <i>impanavac'</i>           | 'to impress'                 |
| <i>lislivic'</i>            | 'to flatter, gratify'        |
| <i>nazaljac'</i>            | 'to annoy, vex'              |
| <i>padvjargac'</i>          | 'to subject to'              |
| <i>patakac'</i>             | 'to indulge'                 |
| <i>sobic'</i>               | 'to urge, make'              |
| <i>spačuvac'</i>            | 'to sympathise'              |
| <i>spagadac'/pa~</i>        | 'to sympathise, feel for'    |
| <i>spryjac'/pa~</i>         | 'to favour'                  |

## Instrumental

|                                  |                                                         |
|----------------------------------|---------------------------------------------------------|
| <i>axvjaravac'</i> (impf and pf) | 'to sacrifice'                                          |
| <i>braviravac'</i>               | 'to defy, brave'                                        |
| <i>valodac'</i>                  | 'control'                                               |
| <i>vedac'</i>                    | 'to manage, be in charge of' <sup>2</sup>               |
| <i>verxavodzie'</i>              | 'to lord it over'                                       |
| <i>ganarycca</i>                 | 'to be proud'                                           |
| <i>grëbavac'/pa~</i>             | 'to abhor'                                              |
| <i>dyryžyrvac'</i>               | 'to conduct'                                            |
| <i>zagadvac'</i>                 | 'to manage, superintend' <sup>3</sup>                   |
| <i>kamandavac'</i>               | 'to be in command'                                      |
| <i>karystacca</i>                | 'to utilize, use'                                       |
| <i>kiravac'</i>                  | 'to be in charge, manage/control, operate' <sup>4</sup> |
| <i>ljubavacca</i>                | 'to admire'                                             |
| <i>mankiravac'</i> (impf and pf) | 'to abhor/to neglect'                                   |
| <i>pagardžac'</i>                | 'to despise'                                            |

<sup>2</sup> This verb is a separate lexical item from the homophonous verb meaning 'to know/feel, experience.'

<sup>3</sup> This verb is a separate lexical item from the homophonous verb meaning 'to order' (*zagadvac'/zagadac'*).

<sup>4</sup> I assume this verb is a separate lexical item from the homophonous accusative Case-assigning verb meaning 'to send.'



|                        |                                                     |
|------------------------|-----------------------------------------------------|
| <i>pastupicca</i> (pf) | ‘to waive, forgo’ <sup>5</sup>                      |
| <i>pravica</i> ’       | ‘to rule over, govern/to drive, steer’ <sup>6</sup> |

### ***Dative indirect objects***

|                          |                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------|
| <i>asisciravac</i> ’     | ‘to assist (medical)’ (i.e. to give assistance to)                                    |
| <i>veryc</i> ’           | ‘to believe’                                                                          |
| <i>vinšavac</i> ’/pa~    | ‘to congratulate’ (i.e. to give one’s congratulations to)                             |
| <i>grazic</i> ’          | ‘to threaten’ (i.e. to give a threat to)                                              |
| <i>dzjakavac</i> ’       | ‘to thank’ (i.e. give thanks to)                                                      |
| <i>pomscic</i> ’/ad~     | ‘to take vengeance (on someone for), revenge oneself (upon someone for)’ <sup>7</sup> |
| <i>služyc</i> ’          | ‘to serve’ (i.e. to provide service to)                                               |
| <i>škodzic</i> ’         | ‘to harm, injure’ (i.e. to cause someone harm)                                        |
| <i>tèlefanavac</i> ’/pa~ | ‘to phone’ (i.e. to give a call to)                                                   |

Some support for the status of a verb like BELIEVE as a type of ditransitive in the Slavic languages in general comes from its argument structure in Czech and BCS. In both these languages the verb BELIEVE is a ditransitive which merges with both an accusative and an (inherent) dative C/case-marked argument, e.g. Czech *věřila mu-DAT každé slovo-ACC* ‘she believed him-DAT every word-ACC’ (i.e. she believed him his every word), and BCS *verovati nekome-DAT nešto-ACC* (literally) ‘to believe someone-DAT something-ACC’.

### ***Non-lexical instrumental case marking***

|                            |                                               |
|----------------------------|-----------------------------------------------|
| <i>gandljavac</i> ’        | ‘to trade’ (i.e. by means of something)       |
| <i>zajmac-ca/zanjac-ca</i> | ‘to occupy oneself with’                      |
| <i>maneŭravac</i> ’/z~     | ‘to manoeuvre/manipulate’ (with, by means of) |
| <i>čikavic-ca/pa~ ca</i>   | ‘to be interested in’                         |

### ***Predicate Instrumental***

|                    |           |
|--------------------|-----------|
| <i>vygljadac</i> ’ | ‘to look’ |
| <i>zvac</i> ’/na~  | ‘to name’ |

<sup>5</sup> I (tentatively) assume this verb is not the true reflexive counterpart of *pastupic*’ ‘to become a member of something/to do some kind of action/to be delivered somewhere/to reach, achieve something’, since it differs significantly in meaning from its non-reflexive counterpart.

<sup>6</sup> I assume this verb is a separate lexical item from the homophonous accusative Case-assigning verb which has a variety of different meanings, including: ‘to send/to get, acquire/to fix, correct, rectify/to sharpen, grind.’

<sup>7</sup> See the notes on the equivalent of this verb in Russian (note 12).

|                            |                    |
|----------------------------|--------------------|
| <i>ličyc'/pa~</i>          | 'to consider'      |
| <i>mec'</i>                | 'to consider'      |
| <i>nazvacca</i>            | 'to be called'     |
| <i>naznačac'/naznačyc'</i> | 'to appoint, name' |
| <i>stanavicca/stac'</i>    | 'to become'        |

## Russian

Most of the following verbs are taken from a variety of different grammars, including the Academy Grammar (Švedova et al. 1980) and Arašonkava and Lemcjugova (1991), among many others. All prefixation possibilities were checked in Zaliznjak (1980).

## Genitive

|                             |                                                                      |
|-----------------------------|----------------------------------------------------------------------|
| <i>gnušat'sja/po~</i>       | 'to abhor, have an aversion (to)' [also takes the instrumental case] |
| <i>dičit'sja</i>            | 'to avoid, be shy (of)'                                              |
| <i>domogat'sja</i>          | 'to seek, solicit, covet'                                            |
| <i>žaždat'</i>              | 'to thirst, to crave'                                                |
| <i>želat'</i>               | 'to wish' (3-place predicate, + GEN + inherent DAT)                  |
| <i>kasat'sja/kosnut'sja</i> | 'to touch/to concern'                                                |
| <i>opasat'sja</i>           | 'to fear, to beware (of), to avoid, to keep off'                     |
| <i>stoit'</i>               | 'to be worth, to deserve'                                            |
| <i>stesnjat'sja/po~</i>     | 'to be shy of'                                                       |
| <i>storonit'sja/po~</i>     | 'to shun'                                                            |
| <i>čuždat'sja</i>           | 'to avoid'                                                           |

## Dative

|                            |                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------|
| <i>akkompanirovat'</i>     | 'to accompany (music)' (e.g. ~ <i>pevcu-DAT</i> na rojale 'to accompany a singer on the piano') |
| <i>aplodirovat'</i>        | 'to applaud'                                                                                    |
| <i>blagoprijatstvovat'</i> | 'to favour'                                                                                     |
| <i>vnimat'/vnjat'</i>      | (poet.) 'to hear, heed' (~ <i>molitve</i> 'to hear prayer')                                     |
| <i>dokučat'</i>            | 'to bother, pester'                                                                             |
| <i>dosaždat'/dosadit'</i>  | 'to annoy' <sup>8</sup>                                                                         |
| <i>zavidovat'/po~</i>      | 'to envy'                                                                                       |

<sup>8</sup> I assume these verbs are not related to the verb *sadit'* 'to plant'.

|                             |                                                           |
|-----------------------------|-----------------------------------------------------------|
| <i>izmenjat'</i> /izmenit'  | 'to be unfaithful to, betray'                             |
| <i>imponirovat'</i>         | 'to impress'                                              |
| <i>l'stit'</i> /po~         | 'to flatter/gratify' <sup>9</sup>                         |
| <i>mankirovat'</i>          | 'to neglect'                                              |
| <i>mešat'</i> /po~          | 'to prevent (from), to hinder, impede, hamper/to disturb' |
| <i>opponirovat'</i>         | 'to oppose'                                               |
| <i>podražat'</i>            | 'to imitate'                                              |
| <i>povinovat'sja</i>        | 'to obey' (impf or pf in the past tense)                  |
| <i>poklonjat'sja</i>        | 'to worship'                                              |
| <i>pokrovitel'stvovat'</i>  | 'to patronise, protect'                                   |
| <i>popustitel'stvovat'</i>  | 'to tolerate'                                             |
| <i>potakat'</i>             | 'to indulge'                                              |
| <i>potvorstvovat'</i>       | 'to indulge, pander'                                      |
| <i>prepjatstvovat'/vos~</i> | 'to hinder, impede, hamper/stand in the way'              |
| <i>protivit'sja /vos~</i>   | 'to oppose, resist, stand up against'                     |
| <i>protivorečit'</i>        | 'to contradict'                                           |
| <i>soprotivljat'sja</i>     | 'to resist'                                               |
| <i>sopustvovat'</i>         | 'to accompany'                                            |
| <i>ugoždat'/ugodit'</i>     | 'to please/or oblige'                                     |

## Instrumental

|                                  |                                                                                                            |
|----------------------------------|------------------------------------------------------------------------------------------------------------|
| <i>bredit'</i>                   | 'to be mad about'                                                                                          |
| <i>bravirovat'</i>               | 'to defy, brave'                                                                                           |
| <i>vedat'</i>                    | 'to manage, be in charge of'                                                                               |
| <i>vertet'</i>                   | 'to twist someone (e.g. around one's little finger)'                                                       |
| <i>verxovodit'</i>               | 'to lord it over'                                                                                          |
| <i>vladet'</i>                   | 'to own, possess; to control, be in possession (of)/(fig.) to have (a) command (of), to have the use (of)' |
| <i>voročat'</i>                  | 'to boss (colloq.)'                                                                                        |
| <i>vosxišat'sja/vosxilit'sja</i> | 'to admire'                                                                                                |
| <i>vtorit'</i>                   | '(music) to play or sing second part to/(fig) to echo, repeat'                                             |
| <i>gnušat'sja</i>                | 'to abhor, have an aversion (to)' <sup>9</sup> [also takes the genitive case]                              |

<sup>9</sup> There is a set expression with this verb: *l'stit' sebja nadeždoj* 'to comfort/console oneself-ACC with the hope'. I assume that the accusative Case-marked reflexive pronoun is lexicalized in this set expression.

|                                      |                                                                       |
|--------------------------------------|-----------------------------------------------------------------------|
| <i>gordit'sja</i>                    | 'to be proud, pride oneself /to put on airs, be haughty'              |
| <i>dirižirovat'</i>                  | 'to conduct (an orchestra)'                                           |
| <i>dorožit'</i>                      | 'to value, prize, set store (by)'                                     |
| <i>zavedovat'</i>                    | 'to manage, superintend, be in charge (of)'                           |
| <i>zaručit'sja</i>                   | 'to secure, enlist support'                                           |
| <i>zloupotrebljat'/zloupotrebit'</i> | 'to misuse'                                                           |
| <i>žertvovat'/po~</i>                | 'to sacrifice'                                                        |
| <i>komandovat'/s~</i>                | 'to command, be in command (of)'                                      |
| <i>ljubovat'sja/po~</i>              | 'to admire' <sup>10</sup>                                             |
| <i>obladat'</i>                      | 'to possess/be possessed (of)'                                        |
| <i>orudovat'</i>                     | 'to handle, boss'                                                     |
| <i>podvergat'/podvergnut'</i>        | 'to subject to'                                                       |
| <i>pol'zovat'sja/vos~</i>            | 'to make use (of), utilize/enjoy'                                     |
| <i>poručat'/poručit'</i>             | 'to charge, commission, entrust'                                      |
| <i>postupať'sja/postupit'sja</i>     | 'to waive, forgo'                                                     |
| <i>pravit'</i>                       | 'to rule over, govern/to drive, steer' <sup>11</sup>                  |
| <i>predvoditel'stvovat'</i>          | 'to lead'                                                             |
| <i>prenebregat'/prenebreč'</i>       | 'to disregard/to scorn, despise'                                      |
| <i>riskovat'</i>                     | 'to risk'                                                             |
| <i>rukovodit'</i>                    | 'to lead, to guide, to direct, to manage'                             |
| <i>sposobstvovat'/po~</i>            | 'to foster/assist/be conducive to, further, promote'                  |
| <i>upravljat'</i>                    | 'to manage, administer, direct, run, to govern, to be in charge (of)' |

### ***Dative indirect objects***

|                      |                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------|
| <i>assistirivat'</i> | 'to assist (medical)' (i.e. 'to give/provide assistance to')                                             |
| <i>verit'/po~</i>    | 'to believe, have faith (in)/to trust (in)/to rely upon'                                                 |
| <i>vredit'/na</i>    | 'to injure, harm, hurt' (e.g. <i>pričinit' vred-ACC komu-nibud'-DAT</i> 'to cause someone-DAT harm-ACC') |
| <i>grozit'/pri~</i>  | 'to threaten' (i.e. to make/say a threat to someone)                                                     |

<sup>10</sup> I assume this verb is a separate lexical item from the verb *ljubovat'* 'to pick, choose, select', i.e. *ljubovat'sja* falls under the category of *reflexiva tantum* verbs.

<sup>11</sup> There are two homophonous lexemes for this verb listed in most dictionaries: (1) to rule, govern/ drive, steer; and (2) to correct. Only the former constitutes a lexical case-assigning verb.

|                          |                                                                                                                                                                                                                                                |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>doverjat'</i>         | 'to trust, confide in' (e.g. <i>dat' komu-nibud'</i> -<br>DAT <i>doverie</i> -ACC 'to give someone-DAT<br>one's trust-ACC')                                                                                                                    |
| <i>lgat'/so~</i>         | 'to lie' (i.e. 'to tell lies to')                                                                                                                                                                                                              |
| <i>zvonit'/po~</i>       | 'to phone' (i.e. 'to make a call to someone')                                                                                                                                                                                                  |
| <i>mstit'/oto~</i>       | 'to take vengeance (on someone for), revenge<br>oneself (upon someone for)' <sup>12</sup>                                                                                                                                                      |
| <i>otvečat'/otvetit'</i> | 'to answer' (e.g. <i>dat' komu-nibud'</i> -DAT <i>otvet</i> -<br>ACC 'to give someone-DAT an answer-ACC')                                                                                                                                      |
| <i>pomogat'/pomoc'</i>   | 'to help' (i.e. 'give or provide help/assistance<br>to')                                                                                                                                                                                       |
| <i>posobit'</i>          | 'to aid' (i.e. 'to provide aid to')                                                                                                                                                                                                            |
| <i>služit'</i>           | 'to serve, devote oneself to' (e.g. <i>okazat'</i><br><i>službu</i> -ACC <i>otečestvu</i> -DAT 'to render service-<br>ACC to one's homeland-DAT'/ <i>okazat'</i> <i>uslugu</i><br><i>komu-nibud'</i> -DAT 'to render service to some-<br>one') |
| <i>sovetovat'</i>        | 'to advise' (i.e. 'to give advice to')                                                                                                                                                                                                         |
| <i>tykat'/tknut'</i>     | 'to address as <i>ty</i> "you"' (i.e. 'to say <i>ty</i> to')                                                                                                                                                                                   |
| <i>ugrožat'</i>          | 'to threaten' (i.e. 'to make a threat to')                                                                                                                                                                                                     |

### ***Non-lexical instrumental case marking***

|                               |                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <i>dovol'stvovat'/u~</i>      | 'to be satisfied (with), to be content (with)'                                                                          |
| <i>zanimat'sja/zanjat'sja</i> | 'to study, to take up or deal with' (lit. 'to<br>occupy oneself with')                                                  |
| <i>izobilovat'</i>            | 'to abound in/with'                                                                                                     |
| <i>merit'sja</i>              | 'to measure oneself by means of' (e.g. <i>~rostop-</i><br><i>INSTR s kem-nibud'</i> 'to measure by means of<br>height') |
| <i>operirovat'</i>            | 'to deal (in/with)'                                                                                                     |
| <i>poxvaljat'sja</i>          | 'to boast (of/about), brag (about)' (i.e. 'to<br>boast by means of something/someone') <sup>13</sup>                    |
| <i>stradat'</i>               | 'to suffer with'                                                                                                        |

<sup>12</sup> These verbs are built on the nominal root *mest'* 'revenge' (the absence of the vowel *e* in the verb is due to the treatment of the so-called *jer* vowels in the history of Russian). In its meaning 'to avenge' the verbs select a PP complement *za* + ACC. I assume that in their meaning 'to take vengeance on', the dative argument with these verbs is equivalent to a so-called indirect object (i.e. it is the goal/recipient of the eventuality denoted by the verb). Some evidence for this assumption comes from the behaviour of the equivalent of these verbs in some of the other Slavic languages. In Slovak, for instance, the verb *pomstit'* + ACC means 'to avenge', whereas *pomstit'* *sa* + inherent DAT (i.e. with the reflexive particle) means 'to take vengeance on'.

<sup>13</sup> See Mrázek (1964: 183) for the claim that the instrumental C/case with verbs like *boast/flaunt* in Russian does not constitute a lexical case.

|                                |                                                         |
|--------------------------------|---------------------------------------------------------|
| <i>torgovat'</i>               | 'to trade' (i.e. 'by means of')                         |
| <i>xvalit'sja/po~</i>          | 'to boast' (i.e. 'with/by means of')                    |
| <i>xvastat'sja/po~</i>         | 'to boast' (i.e. 'with/by means of')                    |
| <i>ščegol'jat'/ščegol'nut'</i> | 'to show off, parade, flaunt' (i.e. 'with/by means of') |

### **Predicate Instrumental**

|                                        |                                                             |
|----------------------------------------|-------------------------------------------------------------|
| <i>javl'jat'sja</i>                    | 'to be'                                                     |
| <i>okazyvat'sja/okazat'sja</i>         | 'to turn out to be'                                         |
| <i>sčitat'</i>                         | 'to consider'                                               |
| <i>vygl'jadet'</i>                     | 'to look like'                                              |
| <i>kazat'sja/po~</i>                   | 'to seem, appear'                                           |
| <i>pritvor'jat'sja/pritvorit'sja</i>   | 'to pretend (to be)'                                        |
| <i>predstavljat'sja/predstavit'sja</i> | 'to pretend (to be)/to pass oneself off as'                 |
| <i>slyt'/pro~</i>                      | 'to have a reputation (for), be said (to be)/to pass (for)' |
| <i>nazyvat'/nazvat'</i>                | 'to call/name'                                              |
| <i>skazyvat'sja/skazat'sja</i>         | 'to proclaim oneself (to be)'                               |

## **Ukrainian**

Most of the following verbs were taken from a variety of grammars and reference works, including Bilodid (1969–73), Pugh and Press (1999), Rusanovskij et al. (1986), Shevelov (1963), and Vyxovanec (1987). All prefixation possibilities were checked in Bevzenko (1985).

### **Genitive**

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| <i>bažaty</i>        | 'to wish' (3-place predicate, + GEN + inherent DAT)         |
| <i>zyčyty</i>        | 'to wish, desire' (3-place predicate, + GEN + inherent DAT) |
| <i>saxatysja</i>     | 'to avoid, shun'                                            |
| <i>curatysja/po~</i> | 'to shun'                                                   |
| <i>škoduvaty</i>     | 'to begrudge' (3-place predicate, + GEN + DAT)              |

### **Dative**

|                              |                                            |
|------------------------------|--------------------------------------------|
| <i>akompanuvaty</i>          | 'to accompany'                             |
| <i>(za)važaty/(za)vadyty</i> | 'to hinder, impede, disturb' <sup>14</sup> |

<sup>14</sup> The verb *zavadyty* has a homophonous counterpart which takes the accusative Case and means 'to hit against/stumble upon'. This verb constitutes a separate lexical item.

|                      |                                 |
|----------------------|---------------------------------|
| <i>zazdryty</i>      | 'to envy'                       |
| <i>imponuvaty</i>    | 'to impress; to awe'            |
| <i>perečyty</i>      | 'to contradict'                 |
| <i>poturaty</i>      | 'to indulge'                    |
| <i>protyvvytysja</i> | 'to oppose, contradict, resist' |

## Instrumental

|                            |                                                 |
|----------------------------|-------------------------------------------------|
| <i>volodyty</i>            | 'to rule/possess'                               |
| <i>gordytysja</i>          | 'to be proud'                                   |
| <i>gorduvaty</i>           | 'to slight, scorn, spurn, disdain'              |
| <i>grebuvaty</i>           | 'to scorn, disdain, spurn, despise'             |
| <i>gyduvaty</i>            | 'to scorn, disdain'                             |
| <i>dorožyty</i>            | 'to prize, value'                               |
| <i>dyryguvaty</i>          | 'to direct/conduct'                             |
| <i>zaviduvaty</i>          | 'to manage'                                     |
| <i>zlovžyvaty/zlovžyty</i> | 'to abuse, misuse'                              |
| <i>žertvuvaty</i>          | 'to sacrifice'                                  |
| <i>keruvaty</i>            | 'to manage, direct, conduct, administer, steer' |
| <i>komanduvaty</i>         | 'to command'                                    |
| <i>korystuvatysja/s~</i>   | 'to make use of, enjoy'                         |
| <i>myluvatysja</i>         | 'to admire' <sup>15</sup>                       |
| <i>pikluvatysja</i>        | 'to take care of, provide for, protect'         |
| <i>pravyty</i>             | 'to govern, rule, operate' <sup>16</sup>        |
| <i>upravljaty</i>          | 'to govern'                                     |

## Dative indirect objects

|                               |                                                 |
|-------------------------------|-------------------------------------------------|
| <i>vidpovidaty/vidpovisty</i> | 'to answer' (i.e. 'to give someone an answer')  |
| <i>viryty/po~</i>             | 'to believe, trust'                             |
| <i>djakuvaty</i>              | 'to thank' (i.e. 'to give one's thanks to')     |
| <i>dopomahaty/dopomohty</i>   | 'to help' (i.e. 'to give help to')              |
| <i>dozvoljaty/dozvolyty</i>   | 'to permit' (i.e. 'to give someone permission') |
| <i>nakazuvaty/nakazaty</i>    | 'to command' (i.e. 'to give someone a command') |
| <i>obicjaty/po~</i>           | 'to promise' (i.e. 'to give someone a promise') |

<sup>15</sup> I treat this as a separate verb from *myluvaty* + ACC 'to caress, fondle' and its reflexive counterpart *myluvatysja* 'to exchange caresses'.

<sup>16</sup> This verb has a variety of different meanings and has three separate listings in the Academy Dictionary. I assume that the instrumental case-assigning verb is a separate lexical item from the verbs which mean 'to go/deliver, provide with/make, do/send'.

|                |                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------|
| <i>radyty</i>  | ‘to advise’ (i.e. ‘to give someone advice’) <sup>17</sup>                                                         |
| <i>služyty</i> | ‘to serve’ (i.e. ‘to provide service’)                                                                            |
| <i>škodity</i> | ‘to hurt, wrong, injure’ (e.g. <i>zavdaty komu-nebud’</i> -DAT <i>škodu</i> -ACC ‘to cause someone-DAT harm-ACC’) |

### Non-lexical instrumental case marking

|                                         |                                               |
|-----------------------------------------|-----------------------------------------------|
| <i>baluvatysja</i>                      | ‘to occupy oneself with’                      |
| <i>byndjučytysja</i>                    | ‘to put on airs (e.g. with one’s words)’      |
| <i>vyxvaljatyjsja/vyxvalytysja</i>      | ‘to boast (e.g. by means of something)’       |
| <i>zabavljatysja/zabavytysja</i>        | ‘to enjoy, amuse oneself with’                |
| <i>zadovol’njatysja/zadovol’nytysja</i> | ‘to be pleased with something’                |
| <i>zaxopljuvatysja/zaxopytysja</i>      | ‘to be delighted with something’              |
| <i>manevruvaty</i>                      | ‘to manipulate/manoeuvre (with/by means of)’  |
| <i>pyšatysja</i>                        | ‘to boast (of), flaunt, strut, pride oneself’ |
| <i>xvalytysja</i>                       | ‘to boast’                                    |
| <i>xyzuvatysja</i>                      | ‘to flaunt, give oneself airs’                |
| <i>čvanytysja</i>                       | ‘to pride oneself upon, boast, brag’          |

### Predicate instrumental

|                                  |                                           |
|----------------------------------|-------------------------------------------|
| <i>vyjavljatysja/vyjavytysja</i> | ‘to come to light, to show oneself to be’ |
| <i>povertatysja/povernutysja</i> | ‘to find oneself to be/to be transformed’ |
| <i>stavaty/staty</i>             | ‘to become’                               |

### Czech

Most of the following verbs were taken from Petr et al. (1986–87), Grepl and Karlík (1986), Běličková (1982), and Janda (1993a). All prefixation possibilities were checked in the Academy Dictionary (Havránek et al. 1989), which lists prefixation possibilities for all verbs in general in Czech.

### Genitive

|                  |                  |
|------------------|------------------|
| <i>bát se</i>    | ‘to fear’        |
| <i>hrozit se</i> | ‘to abhor/dread’ |
| <i>litovat</i>   | ‘to regret’      |
| <i>obávat se</i> | ‘to fear’        |

<sup>17</sup> Some speakers also accept the accusative Case with this verb (Shevelov 1963: 183).



|                                    |                                                  |
|------------------------------------|--------------------------------------------------|
| <i>odvažovat se/odvážit se</i>     | ‘to dare, venture, risk’ <sup>18</sup>           |
| <i>ostýchat se</i>                 | ‘to feel shy of/embarrassed of’                  |
| <i>stranit se</i>                  | ‘to avoid’ <sup>19</sup>                         |
| <i>stydět se</i>                   | ‘to feel ashamed of/shy of’                      |
| <i>štítit se</i>                   | ‘to loathe’                                      |
| <i>týkat se</i>                    | ‘to concern’ <sup>20</sup>                       |
| <i>vážit si</i>                    | ‘to respect’ <sup>21</sup>                       |
| <i>všimát si/všimnout si</i>       | ‘to notice, note, take note of/pay attention to’ |
| <i>zúčastňovat se/zúčastnit se</i> | ‘to attend, participate in’                      |

## Dative

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| <i>bránit</i>         | ‘to prevent’ <sup>22</sup>                                        |
| <i>divit se</i>       | ‘to be surprised at’                                              |
| <i>dominovat</i>      | ‘to dominate, tower above’                                        |
| <i>dvořit se</i>      | ‘to court’                                                        |
| <i>holdovat</i>       | ‘to indulge in, wallow in, have a weakness for’                   |
| <i>hovět</i>          | ‘to indulge, gratify, overindulge’                                |
| <i>imponovat</i>      | ‘to impress someone’                                              |
| <i>konkurovat</i>     | ‘to rival, compete with, be in competition with’                  |
| <i>klanět se</i>      | ‘to bow (to)/pay tribute to, idolize, worship’                    |
| <i>křivdit/u~</i>     | ‘to maltreat, wrong someone’                                      |
| <i>lichotit</i>       | ‘to flatter’                                                      |
| <i>nadbíhat</i>       | ‘to make advances to, make up to’                                 |
| <i>odmlouvat</i>      | ‘to contradict, to talk back’                                     |
| <i>odporovat</i>      | ‘to oppose, resist/contradict/antagonize’                         |
| <i>oponovat</i>       | ‘to oppose/challenge’                                             |
| <i>pochlebovat</i>    | ‘to flatter’                                                      |
| <i>podkuřovat</i>     | ‘to flatter’                                                      |
| <i>posmívat se</i>    | ‘to ridicule, gibe, tease, taunt’                                 |
| <i>pošklebovat se</i> | ‘to jeer at’                                                      |
| <i>prospívat</i>      | ‘to benefit’                                                      |
| <i>přizvukovat</i>    | ‘to second somebody, agree with somebody,<br>play up to somebody’ |
| <i>spílat</i>         | ‘to scold, berate’                                                |

<sup>18</sup> I assume this is a separate lexical item from non-reflexive *odvažovat/odvážit* + ACC ‘to weigh’.

<sup>19</sup> I assume this is a separate lexical item from the verb *stranit* + DAT ‘to side with, favour’.

<sup>20</sup> I assume that this verb is unrelated to the root-*týkat*, which obligatorily takes a prefix.

<sup>21</sup> This verb is a separate lexical item from the verb *vážit* + ACC ‘to weigh’.

<sup>22</sup> This verb has an accusative Case-assigning homophonous counterpart meaning ‘to defend’, i.e. there are two homophonous base verbs in the lexicon.

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| <i>stranit</i>           | ‘to take someone’s side/to give preference or priority to/to favour’ |
| <i>tleskat</i>           | ‘to applaud’                                                         |
| <i>ubližovat/ublížit</i> | ‘to maltreat’                                                        |
| <i>vadit</i>             | ‘to hinder/impede’                                                   |
| <i>vděčit</i>            | ‘to be indebted’                                                     |
| <i>vévodit</i>           | ‘to rule over, dominate’                                             |
| <i>vládnout</i>          | ‘to rule, govern, reign’                                             |
| <i>vylát (pf)</i>        | ‘to scold or rebuke someone’ [rare]                                  |
| <i>vzdorovat</i>         | ‘to defy, brave, stand up to’ <sup>23</sup>                          |
| <i>zaloňovat/zalánět</i> | ‘to stand in someone’s light’                                        |

## Instrumental

|                               |                                           |
|-------------------------------|-------------------------------------------|
| <i>disponovat</i>             | ‘to have at one’s disposal’ <sup>24</sup> |
| <i>opovrhovat, opovrhnout</i> | ‘to despise, scorn’                       |
| <i>pohrdat/pohrdnout</i>      | ‘to despise, scorn’                       |
| <i>pyšnit se</i>              | ‘to take pride in’                        |
| <i>vládnout</i>               | ‘to know (how to use)’                    |

## Dative indirect objects

|                                |                                                                        |
|--------------------------------|------------------------------------------------------------------------|
| <i>asistovat</i>               | ‘to assist’ (i.e. ‘to give assistance to’)                             |
| <i>děkovat</i>                 | ‘to thank’ (i.e. ‘to give someone thanks’)                             |
| <i>důvěřovat</i>               | ‘to trust, rely on’ (i.e. ‘to give someone one’s trust’)               |
| <i>gratulovat</i>              | ‘to congratulate’ (i.e. ‘to give/offer someone one’s congratulations’) |
| <i>hrozit</i>                  | ‘to threaten’ (i.e. ‘to give/say a threat to someone’)                 |
| <i>kondolovat</i>              | ‘to give condolences to’                                               |
| <i>pomáhat/pomoci, pomoci</i>  | ‘to help’ (i.e. ‘to give help to’)                                     |
| <i>přisvědčit/přisvědčovat</i> | ‘to say “yes” to, to agree’                                            |
| <i>přítakávat/přítakat</i>     | ‘to say “yes” to, to agree’                                            |
| <i>radit</i>                   | ‘to advise’ (i.e. ‘to give someone advice’)                            |
| <i>sloužit</i>                 | ‘to serve, attend to, wait on’ (i.e. ‘to give one’s service to’)       |
| <i>škodit</i>                  | ‘to do damage or harm to something or someone’                         |
| <i>telefonovat</i>             | ‘to phone’ (i.e. ‘to give a call to’)                                  |

<sup>23</sup> This verb has two homophonous lexemes; one takes a dative internal argument and means ‘to defy, brave, stand up to’, whereas the other is intransitive and means ‘to sulk, be sulky/obstinate’. The latter verb can take the telicizing prefix *vy-* which in turn assigns the accusative and results in a verb meaning ‘to get something by sulking’.

<sup>24</sup> I assume this is a separate lexical item from the verb *disponovat* + ACC ‘to recruit, win, attract/get, gain, acquire/to plan out, organize’.

|               |                                                                                                                                                                       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>věřit</i>  | ‘to have faith in somebody/to believe’ (e.g.<br><i>Věřila mu-DAT každé slovo-ACC</i> ‘She believed<br>him-DAT every word-ACC’ (i.e.<br>‘she believed his every word’) |
| <i>žehnat</i> | ‘to bless’ (i.e. ‘to give someone one’s blessing’)                                                                                                                    |

### ***Non-lexical instrumental case marking***

|                      |                                                                                    |
|----------------------|------------------------------------------------------------------------------------|
| <i>holedbat se</i>   | ‘to boast, brag’                                                                   |
| <i>plýtvat</i>       | ‘to waste, squander (by means of something)’                                       |
| <i>šetřit</i>        | ‘to save, economize (with/by means of some thing)’                                 |
| <i>vychloubat se</i> | ‘to boast, brag’ (can also take the PP <i>s</i> +<br>INSTR, although this is rare) |

### ***Predicate Instrumental***

|                |             |
|----------------|-------------|
| <i>stát se</i> | ‘to become’ |
| <i>zůstat</i>  | ‘to remain’ |

## **Slovak**

Most of the following verbs are taken from Letz (1950), Pauliny et al. (1968), Bartoš and Gagnaire (1972), Oravec and Bajžíková (1982), Oravec (1967), Oravec et al. (1988). All prefixation possibilities were checked in the Academy Dictionary (Peciar 1959–65).

## **Genitive**

|                                                    |                                       |
|----------------------------------------------------|---------------------------------------|
| <i>bát’ sa</i>                                     | ‘to fear’                             |
| <i>dotýkat’ sa, dotkýnat’ sa/<br/>dotýknut’ sa</i> | ‘to touch’ <sup>25</sup>              |
| <i>dotknút’ sa</i> (pf)                            | ‘to offend/to touch/hint at’          |
| <i>hrozit’ sa</i>                                  | ‘to fear’                             |
| <i>obávat’ sa</i>                                  | ‘to fear/to apprehend (something)’    |
| <i>štítit’ sa</i>                                  | ‘to shun/abhor, loathe’ <sup>26</sup> |
| <i>týkat’ sa/týknut’ sa</i> [archaic]              | ‘to touch/concern’                    |
| <i>ujímat’ sa/ujat’ sa</i>                         | ‘to trouble about, care about’        |

## **Dative**

|                          |                                |
|--------------------------|--------------------------------|
| <i>čeliť</i>             | ‘to resist, oppose’            |
| <i>diviť sa/po~, za~</i> | ‘to wonder, be surprised (at)’ |
| <i>dvorit’ (sa)</i>      | ‘to court’                     |

<sup>25</sup> I have included these verbs as base verbs due to the archaic status of the unprefixated verbs *týkat’ sa/týknut’ sa/tknút’ sa* ‘to touch/concern’.

<sup>26</sup> The ‘non-reflexive’ verb *štítit’* ‘to protect, look after’ exists in Slovak, but it bears no semantic relation to the reflexive form listed here. I therefore treat this verb as a *reflexiva tantum* form.

|                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| <i>holdovať</i>                         | ‘to render homage (to)/to become keen on’ |
| <i>klaňať sa/po~</i>                    | ‘to worship/bow down (to)’                |
| <i>korit’ sa</i>                        | ‘to adore’                                |
| <i>krivdiť/u~</i>                       | ‘to offend’                               |
| <i>kurizovať</i>                        | ‘to court/flatter’                        |
| <i>lichotiť</i>                         | ‘to flatter’                              |
| <i>odolávať/odolať</i>                  | ‘to resist, withstand, oppose’            |
| <i>odporovať</i>                        | ‘to oppose/resist/contradict’             |
| <i>osožiť</i>                           | ‘to be of (some) use or benefit to’       |
| <i>otročiť</i>                          | ‘to fawn on/kowtow to’                    |
| <i>podobat’ sa</i>                      | ‘to resemble’                             |
| <i>predsedat’</i>                       | ‘to chair’                                |
| <i>prekážať</i>                         | ‘to hinder, impede, preclude’             |
| <i>priečiť sa</i>                       | ‘to oppose, resist’                       |
| <i>protivit’ sa/s~</i>                  | ‘to oppose’                               |
| <i>radovať sa/za~</i>                   | ‘to be pleased (at)’                      |
| <i>spreneverovať sa/spreneverit’ sa</i> | ‘to deceive’                              |
| <i>strániť</i>                          | ‘to give preference or priority to’       |
| <i>ubližiť</i>                          | ‘to offend’ <sup>27</sup>                 |
| <i>unikat’/uniknúť</i>                  | ‘to evade, avoid’                         |
| <i>vzdorovať</i>                        | ‘to oppose/resist’                        |
| <i>zavadzať</i>                         | ‘to hinder’                               |

## Instrumental

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| <i>disponovať</i>                     | ‘to have at one’s disposal’ <sup>28</sup> |
| <i>opovírať, opovrhovať/opovrhnúť</i> | ‘to despise’ <sup>29</sup>                |
| <i>pohrdať/pohrdnúť</i>               | ‘to disdain, despise/refuse, renounce’    |
| <i>vládnuť</i>                        | ‘to own, possess, wield’                  |

## Dative indirect objects

|                          |                                                             |
|--------------------------|-------------------------------------------------------------|
| <i>blahopriať</i>        | ‘to congratulate’ (i.e. ‘to give one’s congratulations to’) |
| <i>bohovať</i>           | ‘to swear, curse (at)’ (i.e. ‘to say swearwords to’)        |
| <i>d’akovať/po~, za~</i> | ‘to thank’ (i.e. ‘to give someone thanks’)                  |
| <i>dôverovať</i>         | ‘to trust in, rely on someone’                              |
| <i>hroziť/po~, za~</i>   | ‘to threaten’ (i.e. ‘to give a threat to’)                  |
| <i>kibicovať</i>         | ‘to advise’                                                 |

<sup>27</sup> I assume that this verb is a separate lexical item from the verb *blížiť* ‘to approach, draw near’.

<sup>28</sup> I assume this is a separate lexical item from the verb *disponovať* + ACC ‘to direct/send’.

<sup>29</sup> I assume this is a separate lexical item from the verbs: *vrhať/vrhnúť* + ACC ‘to throw, fling/to cause something or reduce someone/something to something’ and *povírať/povrhnuť* + ACC ‘to throw away/reject’.

|                          |                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------|
| <i>klamat'</i> /o~       | 'to lie' (i.e. 'to tell someone a lie')                                                    |
| <i>pomáhat'</i> /pomôct' | 'to help' (i.e. 'to give assistance or aid to')                                            |
| <i>rúhat'</i> sa         | 'to blaspheme at' (i.e. 'to say something blasphemous to')                                 |
| <i>slúžit'</i>           | 'to serve' (i.e. 'to provide service to')                                                  |
| <i>škodit'</i>           | 'to damage, harm, injure, hurt'                                                            |
| <i>tykat'</i>            | 'to address as <i>ty</i> ' (i.e. <i>hovorit' niekomu ty</i> 'to say <i>ty</i> to someone') |
| <i>velit'</i>            | 'to command' (i.e. 'to give someone a command or order')                                   |
| <i>verit'</i> /u~        | 'to believe'                                                                               |
| <i>zlorečit'</i>         | 'to curse, swear at' (i.e. 'to say swearwords to')                                         |

### ***Non-lexical instrumental case marking***

|                           |                                                |
|---------------------------|------------------------------------------------|
| <i>bavit'</i> sa/za~, po~ | 'to amuse oneself (with)'                      |
| <i>honosit'</i> sa        | 'to boast/be proud' (i.e. with/by means of)    |
| <i>chválit'</i> sa/po~    | 'to boast' (by means of)                       |
| <i>hýrit'</i>             | 'to abound (in/with)'                          |
| <i>plytvat'</i>           | 'to squander, waste' (with/by means of)        |
| <i>šetrit'</i>            | 'to save, economize' (with/by means of)        |
| <i>venovat'</i> sa        | 'to busy oneself with'                         |
| <i>vystatovat'</i> sa     | 'to boast' (by means of)                       |
| <i>zaoberat'</i> sa       | 'to busy oneself with'                         |
| <i>zapodievat'</i> sa     | 'to be busy or occupy oneself (with)/to study' |

### **Polish**

Most of the following verbs were taken from Doroszewski and Wieczorkiewicz (1959), Bielec (1998), Brooks (1975), Sawicki (1988), and Swan (1980). All prefixation possibilities were checked in Doroszewski (1965, 1973).

### **Genitive<sup>30</sup>**

|                    |                           |
|--------------------|---------------------------|
| <i>bać się</i>     | 'to fear'                 |
| <i>bronić</i>      | 'to defend' <sup>31</sup> |
| <i>domagać się</i> | 'to demand' <sup>32</sup> |

<sup>30</sup> Sometimes the verb *czekać* 'to expect' is listed as a genitive case-assigning verb. I have not included this verb in the list here, as native speakers claimed the genitive case with this verb was archaic and that one would never say it. This verb can, however, combine with genitive case-assigning prefixes, e.g. *do-*, *od-*, *po-*, and *wy-*.

<sup>31</sup> The perfective form of this verb *o-bronić* 'to defend successfully' takes an accusative C/case-marked argument and is one of the rare examples of a perfective prefix assigning a C/case. Crucially,

|                              |                                            |
|------------------------------|--------------------------------------------|
| <i>dotykać/dotknąć</i>       | ‘to touch’ <sup>33</sup>                   |
| <i>łaknąć</i>                | ‘to crave’                                 |
| <i>lękać się</i>             | ‘to fear’ <sup>34</sup>                    |
| <i>nienawidzić</i>           | ‘to hate, detest’ <sup>35</sup>            |
| <i>obawiać się</i>           | ‘to fear, be afraid’                       |
| <i>pilnować</i>              | ‘to guard’                                 |
| <i>poniechać</i> (pf)        | ‘to abandon’                               |
| <i>pragnąć</i>               | ‘to desire, long for’                      |
| <i>próbować/s~</i>           | ‘to try, test out’ <sup>36</sup>           |
| <i>szukać</i>                | ‘to look for’                              |
| <i>śłuchać/wy~</i>           | ‘to listen to’ <sup>37</sup>               |
| <i>spodziewać się</i>        | ‘to expect’                                |
| <i>strzec</i>                | ‘to guard, keep watch’                     |
| <i>wymagać</i>               | ‘to demand, require’                       |
| <i>wystrzegać się</i>        | ‘to avoid’                                 |
| <i>zazdrościć</i>            | ‘to envy’ (3-place predicate, + GEN + DAT) |
| <i>zaniechiwać/zaniechać</i> | ‘to abandon’                               |
| <i>żądać/za~</i>             | ‘to demand’                                |
| <i>żałować/po~</i>           | ‘to regret, pity’                          |
| <i>życzyć</i>                | ‘to wish’ (3-place predicate, + GEN + DAT) |

speakers found the ‘in X time’ adverbial ungrammatical or marginal with the perfective verb, as the following example illustrates.

- i. ?? Oni nas o-bronili w dwa tygodnie.  
they us-ACC defended-PF in two weeks  
(intended interpretation) ‘They successfully defended us in two weeks.’

<sup>32</sup> There is no non-reflexive counterpart for this verb, assuming that it constitutes a separate lexical item from the unprefixed aspectually paired verb *magać/magnąć* ‘to quickly overturn, overthrow or upset something/to kick, jump.’

<sup>33</sup> This is arguably a prefixed verb based on *tykać/tknąć* ‘to touch’. I have tentatively included it here, however, as native speakers had varied responses to the existence of the unprefixed verb in the meaning ‘to touch’.

<sup>34</sup> According to the Academy Dictionary, there is an archaic non-reflexive verb *lękać* + ACC ‘to frighten’. I have included the reflexive verb here (i.e. as a *reflexiva tantum* verb), given the archaic nature of the non-reflexive verb. None of my native speaker informants accepted the non-reflexive verb.

<sup>35</sup> I tentatively include this verb here, although it is probably more likely that it constitutes a rare example of the negation clitic written as a unit with the verb (recall that negation obligatorily triggers the genitive on the internal argument of a transitive verb in Polish). The verb *nawidzić* + ACC exists in Polish and means ‘to hit, strike/to obsess, haunt’.

<sup>36</sup> I assume this verb constitutes a separate lexical item from the homophonous accusative Case-assigning verb meaning ‘to rehearse’.

<sup>37</sup> When this verb means ‘to hear’ it takes an accusative Case-marked argument (e.g. *śłuchać było głośną eksplozję*-ACC ‘a loud explosion was heard’) and can merge with telicizing prefixes, e.g. *wy-śłuchać* ‘to hear out’ and *od-śłuchać* ‘to hear through’. That is, there are two homophonous base verbs in the lexicon.

**Dative**

|                                       |                                                                              |
|---------------------------------------|------------------------------------------------------------------------------|
| <i>akompaniować</i>                   | 'to accompany'                                                               |
| <i>dokuczać/dokuczyć</i>              | 'to tease/annoy'                                                             |
| <i>dolegać</i>                        | 'to trouble (someone)'                                                       |
| <i>imponować</i>                      | 'to impress'                                                                 |
| <i>patronować</i>                     | 'to patronize, protect'                                                      |
| <i>podlegać</i>                       | 'to be subordinate to someone, to come under/to be subject to/to succumb to' |
| <i>pochlebiać/pochlebić</i>           | 'to flatter'                                                                 |
| <i>przeciwstawiać/przeciwstawić</i>   | 'to oppose'                                                                  |
| <i>przeczyć/za~</i>                   | 'to deny/contradict/belie'                                                   |
| <i>przysłądać się/przyjrzyć się</i>   | 'to observe, watch'                                                          |
| <i>przypochlebiać/przypochlebić</i>   | 'to blandish, coax/to flatter'                                               |
| <i>schlebiać</i>                      | 'to flatter'                                                                 |
| <i>sprostać</i>                       | 'to be equal to'                                                             |
| <i>sprzeciwiać się/sprzeciwić się</i> | 'to oppose, resist, object (to)'                                             |
| <i>sprzyjać</i>                       | 'to favour, support, promote, to be well disposed towards'                   |
| <i>towarzyszyć</i>                    | 'to accompany'                                                               |
| <i>wymyślać</i>                       | 'to scold'                                                                   |

**Instrumental**

|                              |                                                          |
|------------------------------|----------------------------------------------------------|
| <i>dysponować</i>            | 'to have at one's disposal' <sup>38</sup>                |
| <i>gardzić</i>               | 'to despise, scorn'                                      |
| <i>kierować</i>              | 'to drive, direct, rule' <sup>39</sup>                   |
| <i>opiekować się/za~ się</i> | 'to tend, care for, have charge of'                      |
| <i>poniewierać</i>           | 'to hold in contempt, kick someone around, to manhandle' |
| <i>rządzić</i>               | 'to govern, manage' <sup>40</sup>                        |
| <i>sterować</i>              | 'to steer, regulate'                                     |
| <i>szczyć się</i>            | 'to vaunt'                                               |

<sup>38</sup> There is a homophonous separate verb in the lexicon *dysponować* + ACC 'to order, decree'.

<sup>39</sup> I assume there are two homophonous lexemes for this verb: (1) *kierować* + INSTR 'to direct, lead, guide, steer/control, manage, administer/rule, govern/drive'; and (2) *kierować* + ACC 'to aim (something at someone or something)/to switch, turn'.

<sup>40</sup> The prefixed forms of the verb *rządzić* 'to govern', built on the (nominal) root *rząd* 'government', should not be confused with the prefixed forms of the verb built on the root *porządek* 'order, tidiness' (e.g. *porządek* 'order, tidiness'; *porządkować* 'cleaning, tidiness') or prefixed verbs built on the root *rząd* 'row, line/order, category, class'. That is, prefixed verbs like *o-porządzić* 'to tidy up, groom' and *s-porządzić* 'to make out, compile' are built on the root *porządek*-, not *rząd*-, and prefixed verbs like *zrządzić* 'to order' and *urządzić* 'to organize/arrange', among others, are built on the nominal root *rząd*-'order, category, class/row, line'.

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| <i>władać</i>    | ‘to reign, rule/wield/have use of/be in possession of/command (e.g. have command of a language)’ |
| <i>zarządzać</i> | ‘to administer, run’ <sup>41</sup>                                                               |

### **Dative indirect objects**

|                            |                                                                    |
|----------------------------|--------------------------------------------------------------------|
| <i>asystować</i>           | ‘to assist’ (i.e. ‘to give someone assistance’)                    |
| <i>dziękować/po~</i>       | ‘to thank’ (i.e. ‘to give thanks to’)                              |
| <i>grozić</i>              | ‘to threaten’ (i.e. ‘to make/say a threat to someone’)             |
| <i>kazać/na~</i>           | ‘to command’ (i.e. ‘to give someone a command’)                    |
| <i>pobłogosławić</i>       | ‘to bless/give one’s blessing to’                                  |
| <i>pomagać/pomóc</i>       | ‘to help’ (i.e. ‘to give someone help’)                            |
| <i>radzić/po~</i>          | ‘to advise’ (i.e. ‘to give someone advice’)                        |
| <i>rozkazywać/rozkazać</i> | ‘to order, command’ (i.e. ‘to give a command or order to someone’) |
| <i>służyć/u~</i>           | ‘to serve’ (i.e. ‘to give/provide one’s service to someone’)       |
| <i>szkodzić/za~</i>        | ‘to harm’                                                          |
| <i>ufać/za~</i>            | ‘to trust’ (i.e. ‘to give one’s trust to someone’)                 |
| <i>wierzyć/u~</i>          | ‘to believe’                                                       |

### **Non-lexical instrumental case marking**

|                    |                                     |
|--------------------|-------------------------------------|
| <i>chęścić się</i> | ‘to boast, brag’ (by means of)      |
| <i>manipulować</i> | ‘to manipulate’ (by means of, with) |

### **Bosnian/Croatian/Serbian**

Most of the following verbs were taken from Barić (1979), Djordjević and Zilić (2002), Katičić (1986), and Magner (1991), among others. All prefixation possibilities were checked in Maretić (1963).

### **Genitive**

|                        |                               |
|------------------------|-------------------------------|
| <i>bojati se</i>       | ‘to fear’                     |
| <i>gnušati se</i>      | ‘to loathe’                   |
| <i>kaniti se/o~ se</i> | ‘to avoid, shun, leave alone’ |
| <i>kloniti se</i>      | ‘to avoid’                    |
| <i>ticati se</i>       | ‘to concern’                  |

<sup>41</sup> There is a separate homophonous lexical item (listed as such in many dictionaries) *zarządzać* + ACC ‘to order (something), ordain’.



|                             |                                                                               |
|-----------------------------|-------------------------------------------------------------------------------|
| <i>sramiti se</i>           | ‘to be shy/ashamed of’                                                        |
| <i>stid(j)eti se/po~ se</i> | ‘to be ashamed of’                                                            |
| <i>vrediti</i>              | ‘to be worthwhile’ (e.g. <i>To vredi truda</i> -GEN ‘It is worth the effort’) |

## Dative

|                                                  |                                      |
|--------------------------------------------------|--------------------------------------|
| <i>aplaudirati</i>                               | ‘to applaud’                         |
| <i>imponirati</i> (Cro)/ <i>imponovati</i> (Ser) | ‘to impress’                         |
| <i>laskati/po~</i>                               | ‘to praise, flatter’                 |
| <i>nazdravljati/nazdraviti</i>                   | ‘to toast someone’                   |
| <i>odgovarati</i>                                | ‘to suit, fit, be convenient’        |
| <i>odol(j)evati/odol(j)eti</i>                   | ‘to withstand’ <sup>42</sup>         |
| <i>odupr(ij)eti se</i>                           | ‘to resist’                          |
| <i>oponirati</i> (impf and pf)                   | ‘to oppose’                          |
| <i>pakostiti/na~</i>                             | ‘to act maliciously towards’         |
| <i>pogodovati</i>                                | ‘to favour’                          |
| <i>povinovati se</i>                             | ‘to obey’                            |
| <i>povlađivati/povladiti</i>                     | ‘to yield’                           |
| <i>pridvoriti se</i> (pf)                        | ‘to flatter’                         |
| <i>pripadati</i>                                 | ‘to belong to, be pertinent to’      |
| <i>prkositi</i>                                  | ‘to defy’                            |
| <i>protiv(u)r(ij)ečiti</i>                       | ‘to resist, to oppose’ <sup>43</sup> |
| <i>protivurečiti</i>                             | ‘to contradict’                      |
| <i>suditi</i>                                    | ‘to try, judge’                      |
| <i>udvoravati se/udvoriti se</i>                 | ‘to court, woo/flatter’              |
| <i>ulagivati se/ulagati se</i>                   | ‘to flatter, fawn’                   |

<sup>42</sup> The perfective verb *odol(j)eti* is possible with the ‘in X time’ adverbial, but the adverbial measures the onset of the action described by the verb, as the grammaticality of the following construction suggests:

|    |            |        |     |              |              |                |                |
|----|------------|--------|-----|--------------|--------------|----------------|----------------|
| i. | Ruska      | vojska | je  | odol(j)ela   | Napoleonu    | (neprijatelj)u | za             |
|    | Russian    | forces | AUX | withstood-PF | Napoleon-DAT | (enemy-DAT)    | in             |
|    | ned(j)elju | dana,  | i   | još          | uv(ij)ek     | mu             | odol(j)eva.    |
|    | week       | day    | and | still        | already      | him-DAT        | withstand-IMPF |

‘Russian forces withstood Napoleon (the enemy) in a week, and they’re still withstanding him.’

This example suggests that the verb *odol(j)eti* does not encode an inherent natural endpoint, since the eventuality can continue in time, as the lower clause *i još uv(ij)ek mu odol(j)eva* ‘and they’re still withstanding him’ suggests.

<sup>43</sup> The ‘in X time’ adverbial is grammatical with the perfective verb *usprotiviti se*, but, as with *odol(j)eti* ‘to withstand’, it measures the time taken before the onset of the action, as the following example suggests:

|    |     |                   |          |       |        |              |                  |                |
|----|-----|-------------------|----------|-------|--------|--------------|------------------|----------------|
| i. | Za  | ned(j)elju/tjedan | dana     | Milan | se     | us-protivio  | izgradnji        | hidroelektrane |
|    | in  | week              | day      | Milan | REFL   | opposed-PF   | construction-DAT | hydroelectric  |
|    | i   | još               | uv(ij)ek | se    | tome   | protivi.     |                  |                |
|    | and | still             | already  | REFL  | it-DAT | opposes-IMPF |                  |                |

‘In (after) a week Milan began to oppose the hydroelectric construction and he still opposes it.’

|                      |                                                 |
|----------------------|-------------------------------------------------|
| <i>umiljavati se</i> | ‘to play up to someone/ingratiate oneself with’ |
| <i>zavid(j)eti</i>   | ‘to envy’                                       |

## Instrumental

|                                                  |                                                        |
|--------------------------------------------------|--------------------------------------------------------|
| <i>dičiti se</i>                                 | ‘to pride oneself’ <sup>44</sup>                       |
| <i>dirigirati</i> (Cro)/ <i>dirigovati</i> (Ser) | ‘to conduct’ (e.g. an orchestra)                       |
| <i>gospodariti</i>                               | ‘to govern, manage, direct’ <sup>45</sup>              |
| <i>gospodovati</i> [archaic]                     | ‘to rule, dominate/be master over’                     |
| <i>komandirati</i> (Cro. impf and pf)            |                                                        |
| / <i>komandovati</i> (Ser. impf and pf)          | ‘to command (e.g. troops)’ <sup>46</sup>               |
| <i>ponositi se</i>                               | ‘to be proud/take pride’ <sup>47</sup>                 |
| <i>rukovoditi</i>                                | ‘to manage, run, direct, operate’ <sup>48</sup>        |
| <i>rukovati</i>                                  | ‘to operate, handle, run’                              |
| <i>upravljati</i>                                | ‘to govern, manage, run, administer, control, operate’ |
| <i>vladati</i>                                   | ‘to rule’                                              |

## Dative indirect objects

|                        |                                                 |
|------------------------|-------------------------------------------------|
| <i>asistirati</i>      | ‘to assist’ (i.e. ‘to give someone assistance’) |
| <i>koristiti</i>       | ‘to help’ (i.e. ‘to provide help to’)           |
| <i>pomagati/pomoći</i> | ‘to help’ (i.e. ‘to give help to’)              |
| <i>pozvoniti</i>       | ‘to phone’ (i.e. ‘to give/make a call to’)      |
| <i>pr(ij)etiti/za~</i> | ‘to threaten’ (i.e. ‘to make/say a threat’)     |

<sup>44</sup> There is a non-reflexive verb *dičiti* ‘to adorn, make beautiful’ which has a reflexive counterpart *dičiti se* ‘to be adorned’. I tentatively assume that the verb *dičiti se* in its meaning ‘to pride oneself’ constitutes a separate lexical item from these verbs.

<sup>45</sup> The ‘in X time’ adverbial is possible with the perfective verb *za-gospodariti*, but this adverbial measures the time before the onset of the action, as the following example suggests.

i. Diktator je za-gospodario zemljom za jednu godinu i  
dictator AUX governed country-INSTR in one year and  
još uv(ij)ek gospodari.  
still already governs

‘The dictator governed the country in (after) one year and is still governing it.’

<sup>46</sup> The prefixed verb *pre-komandovati/pre-komandirati* ‘to change one’s place of military service’ is possible with the ‘in X time’ adverbial. The adverbial, however, measures the time elapsed before the onset of the action, not the time taken before an inherent natural endpoint is reached (e.g. *Milan je prekomandovan/prekomandiran u Beograd za 5 dana* ‘Milan changed his place of military service to Belgrade after five days’).

<sup>47</sup> This verb constitutes a different lexical item from the verb *po-nositi* ‘to carry (a bit)’, as is clear from the different accentological patterns of the two verbs, i.e. *pónositi se* ‘to be proud/take pride’ is characterized by a long falling tone on the first vowel, whereas *po-nòsiti* ‘to carry (a bit)’ has a short rising tone on the second vowel.

<sup>48</sup> I assume this verb constitutes a separate lexical item from the homophonous verb *rukovoditi* + ACC ‘to guide, prompt’.

|                               |                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| <i>služiti/po~</i>            | ‘to serve’ (e.g. <i>Šta-ACC ćete služiti gostima-DAT?</i><br>‘What-ACC will you serve the guests-DAT?’) |
| <i>svetiti se/o~ se</i>       | ‘to take vengeance on someone’                                                                          |
| <i>škoditi/na~</i>            | ‘to harm’ (i.e. ‘to cause harm to someone’)                                                             |
| <i>telefonirati</i>           | ‘to phone’ (i.e. ‘to give a call to’)                                                                   |
| <i>uditi/na~</i>              | ‘to harm’ (i.e. ‘to cause harm to someone’)                                                             |
| <i>zahvaljivati/zahvaliti</i> | ‘to thank’ (i.e. ‘to say or give thanks to’)                                                            |

## Non-lexical instrumental case marking

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| <i>baratati</i>            | ‘to handle, manage, work with’ <sup>49</sup>             |
| <i>baviti se</i>           | ‘to engage (oneself) with/in’                            |
| <i>hvalisati se</i>        | ‘to boast, brag’                                         |
| <i>hvastati se</i> (Cro)   | ‘to boast, brag’                                         |
| <i>manevrirati</i> (Cro)   |                                                          |
| / <i>manevrisati</i> (Ser) | ‘to make good use of, to use to advantage’ <sup>50</sup> |
| <i>manipulisati/iz~</i>    | ‘to manipulate (with/by means of)’                       |
| <i>obilovati</i>           | ‘to abound in’ (i.e. ‘to be abundant with’)              |
| <i>operisati/operirati</i> | ‘to deal in/with’                                        |
| <i>trgovati</i>            | ‘to trade in, deal in’                                   |

<sup>49</sup> That this verb does not select a ‘bare’ lexical case-marked argument is supported by the fact that many native speakers use the instrumental case-assigning prepositional phrase *sa* after this verb, e.g. *baratati sa brojevima-INTR* ‘to work with numbers’, instead of the prescriptively correct *baratati brojevima*.

<sup>50</sup> This verb behaves in a similar manner to *baratati* ‘to handle, manage’, i.e. speakers often insert the preposition *sa* ‘with’ after the verb, even though this is prescriptively incorrect.

## References

- Aarts, B. (1992). *Small Clauses in English: The Non-Verbal Types*. Berlin: Mouton De Gruyter.
- Abusch, D. (1997). 'Sequence of Tense and Temporal *De Re*', *Linguistics and Philosophy* 20: 1–50.
- Adger, D. and Ramchand, G. (2003). 'Predication and Equation', *Linguistic Inquiry* 34 (3): 325–59.
- Aikhenvald, A. Iu, Dixon, R. M. W., and Onishi, M. (2001). *Non-Canonical Marking of Subjects and Objects*. Amsterdam/Philadelphia: John Benjamins.
- Akmajian, A. (1977). 'The Complement Structure of Perception Verbs in an Autonomous Syntax Framework', in P. Culicover, T. Wasow, and A. Akmajian (eds), *Formal Syntax*. New York: Academic Press, 427–60.
- Steele, S., and Wasow, T. (1979). 'The Category AUX in Universal Grammar', *Linguistic Inquiry* 10: 1–64.
- Anagnostopoulou, E. (2003). *The Syntax of Ditransitives: Evidence from Clitics*. Berlin/New York: Mouton De Gruyter.
- Andrews, A. (1982). 'A Note on the Constituent Structure of Adverbials and Auxiliaries', *Linguistic Inquiry* 13 (3): 313–17.
- Arad, M. (1998). 'VP-Structure and the Syntax-Lexicon Interface', Doctoral Dissertation. University College London. Distributed by MIT Working Papers in Linguistics.
- Arašonkava, G. U. and Lemcjugova, V. P. (1991). *Kiravanne ŭ belaruskaj i ruskaj movax*. Minsk: Vyššejšaja škola.
- Atraxovič (Krapiva), K. (ed.), (1977–1984). *Tlumačal'ny sloŭnik belaruskaj movy*. Minsk: Akademija navuk Belaruskaj SSR.
- Babby, L. (1974). 'A Transformational Analysis of Transitive -SJA Verbs in Russian', *Lingua* 35: 297–332.
- (1980a). 'The Syntax of Surface Case Marking', *Cornell Working Papers in Linguistics* 1: 1–32.
- (1980b). *Existential Sentences and Negation in Russian*. Ann Arbor, MI: Karoma.
- (1986). 'The Locus of Case Assignment and the Direction of Percolation: Case Theory and Russian', in R. Brecht and J. Levine (eds), *Case in Slavic*. Columbus, OH: Slavica, 170–219.
- (1987). 'Case, Prequantifiers, and Discontinuous Agreement in Russian', *Natural Language and Linguistic Theory* 5: 91–117.
- (1991). 'Noncanonical Configurational Case Assignment Strategies', *Cornell Working Papers in Linguistics* 9: 1–55.
- (1994a). 'Case Theory', in C. Otero (ed.), *Noam Chomsky: Critical Assessments*. London/New York: Routledge, 630–52.

- Babby, L. (1994b). 'A Theta-Theoretic Analysis of Adversity Impersonal Sentences in Russian', in S. Avrutin et al. (eds), *Formal Approaches to Slavic Linguistics: The MIT Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 25–67.
- (1998a). 'Subject Control as Direct Predication: Evidence From Russian', in Ž. Bošković, S. Franks, and W. Snyder (eds), *Formal Approaches to Slavic Linguistics 6: The Connecticut Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 17–37.
- (1998b). 'Voice And Diathesis in Slavic', <<http://www.indiana.edu/~slavconf/linguistics/Babby.pdf>>, accessed 1 January 2003.
- (1999). 'Adjectives in Russian: Primary vs. Secondary Predication', in K. Dziwirek, H. Coats, and C. M. Vakareliyska (eds), *Formal Approaches to Slavic Linguistics 7: The Seattle Meeting 1998*. Ann Arbor, MI: Michigan Slavic Publications, 1–16.
- (2001). 'The Genitive of Negation: A Unified Analysis', in S. Franks, T. Holloway King, and M. Yadroff (eds), *Formal Approaches To Slavic Linguistics: The Bloomington Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 39–55.
- (forthcoming). *The Syntax of Argument Structure*. Cambridge: Cambridge University Press.
- and Brecht, R. (1975). 'The Syntax of Voice in Russian', *Welt Der Slaven*, 342–67.
- and Freiden, R. (1984). 'On the Interaction of Lexical and Syntactic Properties: Case Structure in Russian', *Cornell Working Papers in Linguistics* 6: 71–105.
- Babko-Malaya, O. (1999). 'Zero Morphology: A Study of Aspect, Argument Structure and Case', Doctoral Dissertation. Rutgers University.
- Babyonyshev, M. (1996). 'Structural Connections in Syntax and Processing: Studies in Russian and Japanese', Doctoral Dissertation. MIT.
- Bach, E. (1986). 'The Algebra of Events', *Linguistics and Philosophy* 9: 5–16.
- Bailyn, J. (1995a). 'A Configurational Approach to Russian "Free" Word Order', Doctoral Dissertation. Cornell University.
- (1995b). 'Underlying Phrase Structure and "Short" Verb Movement in Russian', *Journal of Slavic Linguistics* 3 (1): 13–58.
- (1997). 'Genitive of Negation is Obligatory', in W. Browne et al. (eds), *Formal Approaches to Slavic Linguistics* 4. Ann Arbor, MI: University of Michigan Press, 84–114.
- (2001). 'The Syntax of Slavic Predicate Case', *ZAS Papers in Linguistics* 22: 1–23.
- (2004). 'The Case of Q', in O. Arnaudova et al. (eds), *Formal Approaches to Slavic Linguistics 12: The Ottawa Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 1–35.
- and Citko, B. (1999). 'Case and Agreement in Slavic Predicates', in K. Dziwirek, H. Coats, and C. M. Vakareliyska (eds), *Formal Approaches to Slavic Linguistics 7: The Seattle Meeting 1998*. Ann Arbor, MI: Michigan Slavic Publications, 17–37.
- and Rubin, E. (1991). 'The Unification of Instrumental Case Assignment in Russian', *Cornell Working Papers in Linguistics* 9: 99–126.
- Baker, M. (1988a). *Incorporation: A Theory of Grammatical Function Changing*. Chicago/London: University of Chicago Press.

- (1988b). 'Theta Theory and the Syntax of Applicatives in Chichewa', *Natural Language and Linguistic Theory* 6: 353–89.
- Barić, E. (1979). *Priručna gramatika hrvatskoga književnog jezika*. Zagreb: Školska Knjiga.
- Barss, A. (1985). 'Remarks on Akmajian's "The Complement Structure of Perception Verbs" and Gee's "Comments on the Paper by Akmajian"', in V. Levin (ed.), *Lexical Semantics in Review*. Cambridge, MA: Center for Cognitive Science, MIT, 149–65.
- and Lasnik, H. (1986). 'A Note on Anaphora and Double Objects', *Linguistic Inquiry* 17 (2): 347–54.
- Bartoš, J. and Gagnaire, J. (1972). *Grammaire de la langue Slovaque*. Bratislava/Paris: Matica Slovenska. Institut d'études slaves.
- Battistella, E. (1983). 'A Subjacency Puzzle', *Linguistic Inquiry* 14: 698–704.
- Běličková, H. (1982). *Sémantická struktura věty a kategorie pádu*. Prague: Academia nakladatelství, Československé akademie věd.
- Bernštejn, S. B. (ed.) (1958). *Tvoritel'nyj padež v slavjanskix jazykax*. Moscow: Akademija nauk.
- Bevzenko, S. P. (ed.) (1985). *Inversijnyj slovnýk ukrajins'koji movy*. Kiev: Akademija nauk Ukrajin's'koji RSR.
- Bielec, D. (1998). *Polish: An Essential Grammar*. London: Routledge.
- Bilodid, I. K. (1969–1973). *Sučasna ukrajins'ka literaturna mova*. Kiev: Naukova dumka.
- Blume, K. (1998). 'A Contrastive Analysis of Interaction Verbs with Dative Complements', *Linguistics* 36: 253–80.
- Boeder, W. (2005). 'Depictives in Kartvelian', in N. Himmelmann and E. Schultze-Berndt (eds), *Secondary Predication and Adverbial Modification: The Typology of Depictives*. Oxford: Oxford University Press, 201–36.
- Bohnenmeyer, J. and M. Swift (2004). 'Event Realization and Default Aspect', *Linguistics and Philosophy* 27: 263–96.
- Bondarko, A. V. (1971). *Vid i vremja russkogo glagola*. Moscow: Prosveščenie.
- Borer, H. (1994). 'The Projection of Arguments', in E. Benedicto and J. Runner (eds), *Functional Projections. University of Massachusetts Occasional Papers* 17. Amherst, MA: University of Massachusetts.
- (2005a). *Structuring Sense*. Oxford: Oxford University Press.
- (2005b). *Structuring Sense: In Name Only*. Oxford: Oxford University Press.
- Borik, O. (2002). *Aspect and Reference Time*. Utrecht: Proefschrift Universiteit.
- Bošković, Ž. (1999). 'On Multiple Feature Checking: Multiple Wh-Fronting and Multiple Head Movement', in S. Epstein and N. Hornstein (eds), *Working Minimalism*. Cambridge, MA: MIT Press, 159–87.
- (2006). 'Case and Agreement with Genitive of Quantification in Russian', in C. Boeckx (ed.), *Agreement Systems*. Amsterdam/Philadelphia: John Benjamins, 99–120.

- Bowers, J. (1981). *The Theory of Grammatical Relations*. Ithaca, NY: Cornell University Press.
- Brecht, R. (1985). 'The Form and Function of Aspect in Russian', in M. S. Flier and R. D. Brecht (eds), *Issues in Russian Morphosyntax*. Columbus, OH: Slavica, 9–34.
- and Levine, J. (1986). *Case in Slavic*. Columbus, OH: Slavica.
- Brooks, M. Z. (1975). *Polish Reference Grammar*. Slavistic Printings and Reprintings: Textbook Series 2. The Hague: Mouton.
- Brown, S. (1999). *The Syntax Of Negation in Russian*. Stanford, CA: CSLI.
- Bucheli Berger, C. (2005). 'Depictive Agreement and the Development of a Depictive Marker in Swiss German Dialects', in N. Himmelmann and E. Schultze-Berndt (eds), *Secondary Predication and Adverbial Modification: The Typology of Depictives*. Oxford: Oxford University Press, 141–72.
- Carlson, G. (1977). 'Reference to Kinds in English', Doctoral Dissertation. University of Massachusetts at Amherst.
- Carrier Duncan, J. and Randall, J. (1992). 'The Argument Structure and Syntactic Structure of Resultatives', *Linguistic Inquiry* 23 (2): 173–234.
- Cetnarowska, B. (2000). 'The Unaccusative/Unergative Split and the Derivation of Resultative Adjectives in Polish', in T. Holloway King and I. Sekerina (eds), *Formal Approaches to Slavic Linguistics* 8. Ann Arbor, MI: Michigan Slavic Publications, 78–96.
- (2002). 'Unaccusativity Mismatches and Unaccusative Diagnostics from Derivational Morphology', in P. Boucher (ed.), *Many Morphologies*. Somerville, MA: Cascadilla Press, 48–81.
- Channon, R. (1987). 'On the Function of the Instrumental Case in Russian', in R. Channon and L. Shockey (eds), *In Honor of Ilse Lehiste: Ilse Lehiste Pühendusteos*. Dordrecht: Foris, 339–55.
- Chaput, P. (1985). 'On the Question of Aspectual Selection in Denials', in M. S. Flier and A. Timberlake (eds), *The Scope of Slavic Aspect*. Columbus, OH: Slavica, 224–33.
- (1990). 'Temporal and Semantic Factors Affecting Russian Aspect Choice in Questions', in Nils Thelin (ed.), *Verbal Aspect in Discourse*. Amsterdam/Philadelphia: John Benjamins, 285–306.
- Chomsky, N. (1986) *Knowledge of Language*. New York: Praeger.
- (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.
- (2000). 'Minimalist Inquiries', in R. Martin, D. Michaels, and J. Uriagereka (eds), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge, MA: MIT Press, 89–155.
- (2001). 'Derivation By Phase', in M. Kenstowicz (ed.), *Ken Hale: A Life in Language*. Cambridge, MA: MIT Press, 1–52.
- Chvany, C. (1975). *On the Syntax of Be-Sentences in Russian*. Cambridge, MA: Slavica.
- (1984/1997). 'From Jakobson's Cube as Objet D'art to a New Model of the Grammatical Sign', *International Journal of Slavic Linguistics And Poetics*, 43–79. Reprinted in *Selected Essays of Catherine V. Chvany*. Columbus, OH: Slavica, 188–210.

- 
- (1986). 'Jakobson's Fourth and Fifth Dimensions: On Reconciling the Cube Model of Case Meanings with the Two-Dimensional Matrices for Case Forms', in R. D. Brecht and J. D. Levine (eds), *Case in Slavic*. Columbus, OH: Slavica, 107–29.
- (1997). 'Deconstructing Agents and Subjects', in O. Yokoyama and E. Klenin (eds), *Selected Essays of Catherine V. Chvany*. Columbus, OH: Slavica, 63–95.
- Citko, B. (2006a). 'Small Clauses Reconsidered: Not So Small and Not Alike.' Unpublished ms.
- (2006b). 'Copula Sentences Reconsidered', in J. Lavine et al. (eds), *Formal Approaches to Slavic Linguistics: The Princeton Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 83–97.
- Comrie, B. (1976). *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
- Cuervo, M. C. (2003). 'Datives at Large', Doctoral Dissertation. MIT.
- Culicover, P. and Wilkins, W. (1984). *Locality in Linguistic Theory*. New York: Academic Press.
- Czepluch, H. (1988). 'Case Patterns in German: Some Implications for the Theory of Abstract Case', *McGill Working Papers in Linguistics, Special Issue on Comparative Germanic Syntax*, 79–122.
- Dąbrowska, E. (1997). *Cognitive Semantics and the Polish Dative*. Berlin/New York: Mouton De Gruyter.
- De Swart, H. (1988). 'Aspect Shift and Coercion', *Natural Language and Linguistic Theory* 16: 347–85.
- Declerck, R. (1982a). 'On the Derivation of Dutch Bare Infinitives After Perception Verbs', *Theoretical Linguistics* 9: 161–79.
- (1982b). 'The Triple Origin of Participial Perception Verb Complements', *Linguistic Analysis* 10: 1–26.
- Demonte, V. (1988). 'Remarks on Secondary Predicates, C-Command, Extraction, and Reanalysis', *The Linguistic Review* 6 issue 1: 1–39.
- Dickey, S. (2000). *Parameters of Slavic Aspect: A Cognitive Approach*. Stanford, CA: CSLI Publications.
- (2005). 'S-/Z- and the Grammaticalization of Aspect in Slavic', *Slovenski Jezik-Slovene Linguistic Studies* 5 (1–53): 3–55.
- Dimitrova-Vulchanova, M. (1999). *Verb Semantics, Diathesis and Aspect*. Munich: LINCOM Studies in Theoretical Linguistics.
- Dixon, R. M. W. (1979). 'Ergativity', *Language* 55: 59–138.
- (1994). *Ergativity*. Cambridge: Cambridge University Press.
- Djordjević, M. And Zilić, E. (2002). *Satelliten des Verbs im Deutschen und im Bosnisch-Kroatisch-/Serbischen: Beiträge zur Kontrastiven Grammatik*. Tübingen: Groos.
- Doroszewski, W. (1965). *Indeks a tergo do słownika języka polskiego S. B. Lindego*. Warsaw: Wydawnictwo Uniwersytetu Warszawskiego.
- (ed.) (1973). *Indeks a tergo do słownika języka polskiego*. Warsaw: Polska akademia nauk.



- Doroszewski, W. and Wieczorkiewicz, B. (1959). *Gramatyka opisowa Języka polskiego z ćwiczeniami*. Warsaw: Polska Akademia Nauk.
- Dowty, D. (1979). *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ*. Dordrecht/London: Reidel.
- (1991). 'Thematic Proto-Roles and Argument Selection', *Language* 67: 547–619.
- Dziwirek, K. (2002). 'A Different Kind of Non-Canonical Case Marking: The Slavic Verb "To Teach"', *Slavic and East European Journal* 46 (2): 319–47.
- Emonds, J. E. (1976). *A Transformational Approach to English Syntax*. New York: Academic Press.
- (1985). *A Unified Theory of Syntactic Categories*. Dordrecht: Foris.
- (1987). 'The Invisible Category Principle', *Linguistic Inquiry* 18 (4): 613–32.
- Enç, M. (2004). 'Rethinking Past Tense', in J. Guéron and J. Lecarme (eds), *Syntax of Time*. Cambridge, MA: MIT Press, 203–15.
- Eriksen, P. K. (2000). *On the Semantics of the Russian Copular Verb 'Byt'*. Oslo: Meddelelser.
- Felser, C. (1999). *Verbal Complement Clauses: A Minimalist Study of Direct Perception Constructions*. Amsterdam/Philadelphia: John Benjamins.
- Ferrell, J. (1953). 'On the Aspects of *Byt'* and on the Position of the Periphrastic Imperfective Future in Contemporary Literary Russian', *Word* IX: 362–76.
- Fiengo, R. (1974). 'Semantic Conditions on Surface Structure', Doctoral Dissertation. MIT.
- Filip, H. (1994). 'Aspect and the Semantics of Noun Phrases', in C. Vet and C. Vetter (eds), *Tense and Aspect in Discourse*. Berlin/New York: Mouton de Gruyter, 227–56.
- (1996). 'Integrating Telicity, Aspect and NP Semantics: The Role of Thematic Structure', in J. Toman (ed.), *Formal Approaches to Slavic Linguistics: The College Park Meeting 1994*. Ann Arbor, MI: Michigan Slavic Publications, 61–96.
- (1999). *Aspect, Eventuality Types, and Nominal Reference*. Outstanding Dissertations in Linguistics: New York/London: Garland Publishing.
- (2000a). 'Nominal and Verbal Semantic Structure: Analogies and Interactions', in N. Gisborne (ed.), *A Special Issue of Language Sciences*, 453–501.
- (2000b). 'The Quantization Puzzle', in C. Tenny and J. Pustejovsky (eds), *Events as Grammatical Objects*. Stanford, CA: CSLI, 39–96.
- (2001). 'The Semantics of Case in Russian Secondary Predication', in R. Hastings, B. Jackson, and Z. Zvolenszky (eds), *Proceedings of Semantics and Linguistic Theory (SALT) XI*. Ithaca, NY: CLC Publications, Department of Linguistics, Cornell University, 192–211.
- (2003). 'Prefixes and the Delimitation of Events', *Journal of Slavic Linguistics* 11: 55–101.
- (2005). 'The Telicity Parameter Revisited', *Semantics and Linguistic Theory (SALT) XIV*. Ithaca, NY: CLC Publications, Department of Linguistics, Cornell University.
- Fillmore, C. (1968). 'The Case for Case', in E. Bach and R. Harms (eds), *Universals in Linguistic Theory*. New York: Reinhart & Winston, 1–88.

- Flier, M. S. and Timberlake, A. (1985). *The Scope of Slavic Aspect*. Columbus, OH: Slavica.
- Forsyth, J. (1970). *A Grammar of Aspect: Usage and Meaning in the Russian Verb*. Cambridge: Cambridge University Press.
- Fowler, G. (1993). 'A Syntactic Account of Derivational -sja in Russian', in R. Maguire and A. Timberlake (eds), *American Contributions to the Eleventh International Congress of Slavists*. Columbus, OH: Slavica, 270–84.
- (1994). 'Verbal Prefixes as Functional Heads', *Studies in the Linguistic Sciences* 24 (1/2): 171–85.
- (1996a). 'Oblique Passivization in Russian', *Slavic and East European Journal* 40 (3): 519–45.
- (1996b). 'An Articulated Theory of Aspect and Prefixation in Russian', in J. Toman (ed.), *Formal Approaches to Slavic Linguistics. The College Park Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 97–122.
- Franks, S. (1990). 'Case, Configuration and Argumenthood: Reflections on the Second Dative', *Russian Linguistics* 14: 231–54.
- (1994). 'The Functional Structure of Russian Numeral Phrases', in J. Toman (ed.), *Formal Approaches to Slavic Linguistics: The Ann Arbor Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 31–76.
- (1995). *Parameters of Slavic Morphosyntax*. New York/Oxford: Oxford University Press.
- (2002). 'A Jakobsonian Feature Based Analysis of the Slavic Numeric Quantifier Genitive', *Journal of Slavic Linguistics* 10: 141–81.
- Freed, A. (1979). *The Semantics of Aspectual Verb Complementation*. Dordrecht: Reidel.
- Galkina-Fedoruk, E. M., Gorškova, K. V., and Šanskij, N. M. (1958). *Sovremennij russkij jazyk. Leksikologija, fonetika, morfologija*. Moscow: Gosudarstvennoe učebno-pedagogičeskoe izdatel'stvo.
- Galton, H. (1980). 'Where "Completed Action" for the Perfective Verb Goes Wrong', *Lingua* 42: 49–55.
- Garey, H. (1957). 'Verbal Aspects in French', *Language* 33: 91–110.
- Gebert, L. (1992). 'L'aspect "parfait" en langues Slaves', in M. Guiraud-Weber and C. Zaremba (eds), *Linguistique et Slavistique: Melanges offerts à Paul Garde*. Aix-En-Provence: Publications de l'Université de Provence, 213–22.
- Geist, L. (1999). 'Russisch Byt' (Sein) als Funktionale und/oder Lexikalische Kategorie', in E. Lang and L. Geist (eds), *Kopula-Prädikativ-Konstruktionen als Semantik/Syntax-Schnittstelle*. Berlin: ZAS Papers in Linguistics 14, 1–40.
- (2005). 'Copular Sentences in Russian versus Spanish at the Syntax-Semantics Interface', in C. Ebert and C. Endriss (eds), *Proceedings of Sinn und Bedeutung* 10, Zaspol 44 (1): 99–110.
- (2006). *Die Kopula und Ihre Komplemente*. Tübingen: Max Niemeyer Verlag.
- (Forthcoming). 'Predication and Equation in Copular Sentences: Russian versus English', in I. Comorovski and K. Von Heusinger (eds), *Existence: Semantics and Syntax*. Dordrecht: Springer.

- Gerritsen, N. (1990). *Russian Reflexive Verbs*. Amsterdam/Atlanta: Rodopi.
- Geuder, W. (2002). 'Oriented Adverbs: Issues in the Lexical Semantics of Event Adverbs', Doctoral Dissertation. Tübingen Universität.
- Glovinskaja, M. J. (1982). *Semantičeskije typy vidovyx protivopostavlenij russkogo glagola*. Moscow: Nauka.
- Goledzinowska, M. (2004). 'Syntactic Transitivity of SE-Reflexives in Polish', *Toronto Working Papers in Linguistics* 22: 93–120.
- Gortan-Premk, D. (1962). 'Padež objekta u negativnom rečenicama u savremenom srpskohrvatskom književnom jeziku', *Naš jezik* 12: 130–48.
- Grepl, M. and Karlík, P. (1986). *Skladba spisovné češtiny*. Prague: Státní pedagogické nakladatelství.
- Hale, K. and Keyser, S. J. (1993). 'On Argument Structure and the Lexical Expression of Syntactic Relations', in K. Hale and S. J. Keyser (eds), *The View From Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, MA: MIT Press, 53–110.
- (2002). *Prolegomenon to a Theory of Argument Structure*, Linguistic Inquiry Monograph 39. Cambridge, MA: MIT Press.
- Harley, H. (2005). 'How Do Verbs Get Their Names? Denominal Verbs, Manner Incorporation, and the Ontology of Verb Roots in English', in N. Erteschik-Shir and T. R. Rapoport (eds), *The Syntax of Aspect*. Oxford: Oxford University Press, 42–64.
- Harves, S. (2002a). 'Genitive of Negation and the Syntax of Scope', in M. Van Koppen et al. (eds), *Proceedings of Console IX*: 96–110.
- (2002b). 'Unaccusative Syntax in Russian', Doctoral Dissertation. Princeton University.
- (2006). 'Non-Agreement, Unaccusativity, and the External Argument Constraint', in J. Lavine (ed.), *Formal Approaches to Slavic Linguistics 14: The Princeton Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 172–88.
- (forthcoming), 'Unaccusativity', *Handbooks of Linguistics and Communication Science: Slavic Languages*. Berlin: Mouton De Gruyter.
- Hausenblas, K. (1958). *Vývoj předmětového genitive v češtině*. Prague: Academia nakladatelství Československé akademie věd.
- Havránek, B. et al. (eds) (1989). *Slovník spisovného jazyka českého*. Prague: Academia nakladatelství Československé akademie věd.
- Heggie, L. (1988). 'The Syntax of Copular Structures', Doctoral Dissertation. University Of Southern California.
- Heycock, C. (1994). *Layers Of Predication: The Non-Lexical Syntax of Clauses*. New York: Garland.
- Heycock, C. and Kroch, A. (1999). 'Pseudocleft Connectedness: Implications for the LF Interface Level', *Linguistic Inquiry* 30 (3): 365–97.
- (2002). 'Topic, Focus, and Syntactic Representations', in L. Mikkelsen and C. Potts (eds), *Proceedings of the WCCFL* 21. Somerville, MA: Cascadia Press, 101–25.

- Higgins, F. R. (1979). *The Pseudo-Cleft Construction in English*. New York: Garland.
- Himmelmann, N. and Schultze-Berndt, E. (2004). 'Depictive Secondary Predicates in Crosslinguistics Perspective', *Linguistic Typology* 8 (1): 59–131.
- Hinrichs, E. (1985). 'A Compositional Semantics for Aktionsarten and NP Reference', Doctoral Dissertation. Ohio State.
- Hinterhölzl, R. (2001). 'Semantic Constraints on Case Assignment in Secondary Adjectival Predicates in Russian', in G. Jäger et al. (eds), *ZAS Papers in Linguistics* 22: 99–112.
- Hoekstra, T. (1988). 'Small Clause Results', *Lingua* 74: 101–39.
- Holmberg, A. and Platzack, C. (1995). *The Role of Inflection in Scandinavian Syntax*. Oxford: Oxford University Press.
- Horn, G. (1975). 'On the Nonsentential Nature of the POSS-ING Construction', *Linguistic Analysis* 1: 333–87.
- Hornstein, N. and Lightfoot, D. (1987). 'Predication and PRO', *Language* 63: 23–52.
- Huang, J. (1982). 'Move *Wh* in a Language without *Wh*-Movement', *Linguistic Review* 369–416.
- Ionin, T. (2001) 'Scope in Russian: Quantifier Movement and Discourse Function', <<http://www.icsunysb.edu/clubs/nels/jbailyn/synhand.html>
- Ionin, T. and Matushansky, O. (2002). 'Encasing the Time', Paper Given at NELS 33, MIT.
- Isačenko, A. V. (1960). *Grammatičeskij stroj russkogo jazyka v sopostavlenii s slovatskim*. Bratislava: Slovatskaja akademija nauk.
- (1962). *Die Russische Sprache der Gegenwart I: Formenlehre*. Halle: Max Niemeyer.
- Israeli, A. (1996). 'Discourse Analysis of Russian Aspect: Accent on Creativity', *Journal of Slavic Linguistics* 4 (1): 8–49.
- Itkonen, T. (1976). *Erään Sijamuodon Ongelmia*. Opusculae Instituti Linguae Fennicae: Universitas Helsingiensis.
- Ivančev, S. (1971). *Problemi na aspektualnostta v slavjanskite ezici*. Sofia: Izdatelstvo na Bălgarskata akademija na naukite.
- Iwakura, K. (1984). 'Government Theory and NP-Ing Constructions', *Linguistics Analysis* 15: 31–54.
- Jakobson, R. (1936/1971). 'Beitrag zur Allgemeinen Kasuslehre: Gesamtbedeutungen der Russischen Kasus', *Travaux du cercle linguistique de Prague* VI, 240–88. Reprinted in *Selected Writings*, Vol. 2. The Hague: Mouton, 23–71.
- (1957/1971). *Shifters, Verbal Categories and the Russian Verb*. Cambridge: Harvard University, Department Of Slavic Languages. Reprinted in *Selected Writings*, Vol.2. The Hague: Mouton, 130–147.
- (1958/1971). 'Morfoložičeskie nabljudenija nad slavjanskim skloneniem', *American Contributions to the Fourth International Congress of Slavicists*, 127–56. Reprinted in *Selected Writings*, Vol. 2. The Hague: Mouton, 54–83.
- (1971). *Selected Writings*. The Hague: Mouton.
- Janda, L. (1993a). *A Geography of Case Semantics: The Czech Dative and the Russian Instrumental*. Berlin: Mouton de Gruyter.

- Janda, L. (1993b), 'The Shape of the Indirect Object in Central and Eastern Europe', *Slavic and East European Journal* 4 (37): 533–63.
- (2001). 'A Cognitive Model of the Russian Accusative Case', in R. K. Potapova, V. D. Solov'ev, and V. N. Poljakov (eds), *Trudy meždunarodnoj konferencii kognitivnoe modelirovanie*. Moscow: MSIS, 20–43.
- Johannessen, J. B. (1998). *The Syntax of Coordination*. New York: Oxford University Press.
- Johnson, K. (1988). 'Clausal Gerunds, the ECP, and Government', *Linguistic Inquiry* 19: 583–609.
- Jónsson, J. G. (2003). 'Not So Quirky: On Subject Case in Icelandic', in E. Brandner and H. Zinsmeister (eds), *New Perspectives on Case Theory*. Stanford, CA: CSLI Publications, 127–63.
- Junghanns, U. and Zybatow, G. (1997). 'Syntax and Information Structure of Russian Clauses', *Formal Approaches to Slavic Linguistics: The Cornell Meeting 1995*. Ann Arbor, MI: Michigan Slavic Publications, 289–319.
- Kamp, H. and Reyle, U. (1993). *From Discourse to Logic: Introduction to Model-Theoretic Semantics of Natural Language*. Dordrecht/Boston/London: Kluwer.
- Kański, Z. (1986). *Arbitrary Reference and Reflexivity: A Generative Study of the Polish Pronoun się and its English Equivalents*. Katowice: Uniwersytet Śląski.
- Katičić, R. (1986). *Sintaksa hrvatskoga književnog jezika: Nacrt za gramatiku*. Zagreb: Jugoslavenska akademija znanosti i umjetnosti.
- Kiparsky, P. (1998). 'Partitive Case and Aspect', in M. Butt and W. Geuder (eds), *The Projection of Arguments*. Stanford: CSLI, 265–308.
- Klein, W. (1994). *Time in Language*. London/New York: Routledge.
- (1995). 'A Time-Relational Analysis of Russian Aspect', *Language* 71 (4): 669–95.
- Klenin, E. (1975). 'The Pronoun *Sebja*, Particle *Sebe* and Affix *-sja*', *Slavic and East European Journal* 19 (2): 188–99.
- Koizumi, M. (1994a). 'Layered Specifiers', *Proceedings of the North Eastern Linguistic Society* 24. Amherst, MA: GLSA, 255–69.
- (1994b). 'Secondary Predicates', *Journal of East Asian Linguistics* 3: 25–79.
- Kondrashova, N. (1994). 'Agreement and Dative Subjects in Russian', in S. Avrutin, L. Progovac, and J. Toman (eds), *Formal Approaches to Slavic Linguistics: The MIT Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 255–85.
- (1996). 'The Russian Copula: A Unified Approach', in J. Toman (ed.), *Formal Approaches to Slavic Linguistics: The College Park Meeting*. Ann Arbor: Michigan Slavic Publications, 255–85.
- Kratzer, A. (2004). 'Telicity and the Meaning of Objective Case', in J. Guéron and J. Lecarme (eds), *The Syntax of Time*. Cambridge, MA: MIT Press, 389–424.
- Krifka, M. (1986). 'Nominalreferenz und Zeitkonstitution. Zur Semantik von Massentermen, Individualtermen, Aspektklassen', Doctoral Dissertation. University Of Munich. Published by Wilhelm Fink Verlag, Munich 1989.
- (1989). 'Nominal Reference, Temporal Constitution and Quantification in Event Semantics', in R. Bartsch, J. Van Benthem, and P. Van Emde Boas (eds), *Semantics and Contextual Expression*. GRASS 11. Dordrecht: Foris, 75–115.

- (1992). 'Thematic Relations as Links Between Nominal Reference and Temporal Constitution', in I. A. Sag and A. Szabolcsi (eds), *Lexical Matters*. Stanford: CSLI, 29–53.
- (1998). 'The Origins of Telicity', in S. Rothstein (ed.), *Events and Grammar*. Dordrecht: Kluwer, 197–235.
- Křížková, H. (1969). 'Predikativnoe opredelenie i struktura predloženíja v sovremenom russkom jazyke', *Slavia* 38: 1–35.
- Kubiński, W. (1987). *Reflexivization in English and Polish: An Arc Pair Grammar Analysis*. Tübingen: Max Niemayer Verlag.
- Kučera, H. (1983). 'A Semantic Model of Verbal Aspect', in M. S. Flier (ed.), *American Contributions to the IXth International Congress of Slavists*, Kiev. Columbus, OH: Slavica, 171–84.
- Kuryłowicz, J. (1960). *Esquisses linguistiques*. Wrocław-Krakow: Ossolineum.
- Kutsscher, S. and Genç, N. S. (2005). 'On Depictive Secondary Predicates in Laz', in N. Himmelmann and E. Schultze-Berndt (eds), *Secondary Predication and Adverbial Modification*. Oxford: Oxford University Press, 237–58.
- Larson, R. (1988). 'On the Double Object Construction', *Linguistic Inquiry* 19: 335–91.
- Laškova, L. (1968). 'Zamjana na slavjanskija genitiv s akuzativ v sürboxürvatskija ezik', *Ezik i literatura* 23 (1): 55–62.
- Lavine, J. and Freiden, R. (2002). 'The Subject of Defective T(ense) in Slavic', *Journal of Slavic Linguistics* 10 (1–2): 251–87.
- Legendre, G. (1997). 'Secondary Predication and Functional Projections in French', *Natural Language and Linguistic Theory* 15 (1): 43–87.
- Leiononen, M. (1982). *Russian Aspect, 'Temporal'naja Lokalizacija' and Definiteness/Indefiniteness*. Helsinki: Neuvostoliittoinstituutti.
- Letz, B. (1950). *Gramatika slovenského jazyka*. Bratislava: Štátne nakladateľstvo.
- Levin, Beth and Rappaport Hovav, M. (2005). *Argument Realization*. Cambridge: Cambridge University Press.
- Levine, J. and Jones, C. (1996). 'Agent, Purpose, and Russian Middles', *Journal of Slavic Linguistics* 4 (1): 50–75.
- Levinson, D. (2005). 'Aspect in Negative Imperatives and Genitive of Negation: A Unified Analysis of Two Phenomena in Slavic Languages', [http://www.stanford.edu/~dmitryle/Levinson2005\\_ImperfectiveAndGenitiveOfNegation.pdf](http://www.stanford.edu/~dmitryle/Levinson2005_ImperfectiveAndGenitiveOfNegation.pdf), accessed 1 January 2006.
- Ludwig, J. (1995). 'Multiple Verb Prefixation in Russian, Polish, and Ukrainian', Doctoral Dissertation. Indiana University.
- Magner, Thomas F. (1991). *Introduction to the Croatian and Serbian Language*. London: Pennsylvania State University Press.
- Maling, J. (2001). 'Dative: The Heterogeneity of the Mapping among Morphological Case, Grammatical Functions, and Thematic Roles', *Lingua* 111 (4–7): 419–64.
- (2002). 'Verbs with Dative Objects in Icelandic', *Íslenskt Mál* 24: 31–105.
- Mallén, E. (1992). 'Secondary Predicates and Lexical Identification', *Studia Linguistica* 46 (1): 1–29.

- Marantz, A. (1992). 'Case and Licensing', *ESCOL* '91, 234–53.
- (1993). 'Implications of Asymmetries in Double Object Constructions', in S. Mchombo (ed.), *Theoretical Aspects of Bantu Grammar*. Stanford: CSLI, 113–50.
- Maretić, T. (1963). *Gramatika hrvatskoga ili srpskoga književnog jezika*. Zagreb: Matica hrvatska.
- Matesić, J. (1965). *Rückläufiges Wörterbuch des Serbokroatischen*. Wiesbaden: Harrasowitz.
- Matushansky, O. (2000). 'The Instrument of Inversion: Instrumental Case in the Russian Copula', in R. Billerey and B. O. Lillehaugen (eds), *WCCFL 19 Proceedings*. Somerville, MA: Cascadilla Press, 288–301.
- (2002). 'On Formal Identity of Russian Prefixes and Prepositions', *MIT Working Papers in Linguistics*, 69–79.
- Mayo, P. (1993). 'Belorussian', in B. Comrie and G. Corbett (eds), *The Slavonic Languages*. London/New York: Routledge, 887–946.
- Mazon, A. (1914). *Emplois des aspects du verb russe*. Paris: Bibliothèque de l'institut français de Saint-Petersbourg.
- McNally, L. (1994). 'Adjunct Predicates and the Individual/Stage Distinction', *West Coast Conference on Formal Linguistics*, 12: 561–76.
- Mel'čuk, I. A. (1986). 'Toward a Definition of Case', in R. D. Brecht and J. D. Levine (eds), *Case in Slavic*. Columbus, OH: Slavica, 36–85.
- Mikkelsen, L. (2005). *Copular Clauses: Specification, Predication and Equation*. Amsterdam/Philadelphia: John Benjamins.
- Miklosich, F. (1926). *Vergleichende Grammatik der Slavischen Sprachen*, IV. *Syntax*. Heidelberg: Carl Winters.
- Moro, A. (1995). 'Small Clauses with Predicative Nominals', *Syntax and Semantics* 28: 109–32.
- (1997). *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge: Cambridge University Press.
- Mrázek, R. (1964). *Sintaksis ruskogo tvoritel'nogo: Strukturno-sravnitel'noe issledovanie*. Prague: Státní pedagogické nakladatelství.
- Munn, A. (1993). 'Topics in the Syntax and Semantics of Coordinate Structures', Doctoral Dissertation. University Of Maryland, College Park.
- Mustajoki, A. (1985). *Padež dopolnenija v russkix otricateľ'nyx predloženijax 1: Izyskanija novyx metodov v izučenii staroj problemy*. Helsinki: Helsinki University, Slavica Helsingiensia.
- Mustajoki, A. and Heino, H. (1991). *Case Selection for the Direct Object in Russian Negative Clauses*. Helsinki: Helsinki University, Slavica Helsingiensia.
- Naughton, J. D. (2005). *Czech: An Essential Grammar*. London: Routledge.
- Neidle, C. (1988). *The Role of Case in Russian Syntax*. Studies In Natural Language and Linguistic Theory 10. Dordrecht/Boston: Kluwer.
- Nichols, J. (1981). *Predicate Nominals: A Partial Surface Syntax of Russian*. Berkeley, CA: University of California Press.
- (1982). 'Ingush Transitivity and Detransitivization', *Berkeley Linguistics Society* 8: 445–62.

- (1984). 'Direct and Oblique Objects in Chechen-Ingush and Russian', in F. Plank (ed.), *Objects: Towards a Theory of Grammatical Relations*. London: Academic Press, 183–209.
- Rappaport, G., and Timberlake, A. (1980). 'Subject, Topic, and Control in Russian', *Proceedings of the Sixth Annual Meeting of the Berkeley Linguistics Society*, 372–86.
- Noonan, M. (1985). 'Complementation', in T. Shopen (ed.), *Language Typology and Syntactic Description: Complex Constructions*. Cambridge: Cambridge University Press, 42–140.
- Ogihara, T. (1996). *Tense, Attitude, and Scope*. Dordrecht: Kluwer.
- Oravec, J. (1967). *Vázba slovies v slovenčine*. Bratislava: Slovenská akadémia vied.
- and Bajžíková, E. (1982). *Súčasný slovenský spisovný jazyk*. Bratislava: Slovenské pedagogické nakladateľstvo.
- Bajžíková, E., and Furdík, J. (1988). *Súčasný slovenský spisovný jazyk: morfológia*. Bratislava: Slovenské pedagogické nakladateľstvo.
- Padučeva, E. V. (1986). 'Semantika vida i točka oščeta', *Isvestija akademii nauk: Serija literaturny i jazyka* 45 (5): 413–24.
- (1993). 'Rezultativnye značeniya nesoversennogo vida v russkom jazyke: Obščefaktičeskoe i akcional'noe', *Voprosy jazykoznanija* 1: 64–74.
- (1996). *Semantičeskije issledovanija. semantika vremeni i vida v russkom jazyke. Semantika Narrativa*. Moscow: Jazyki russkoj kul'tury.
- and Uspenskij, V. A. (1979). 'Podležaščee ili skazuemoe? Semantičeskij kriterij različenija podležaščego i skazuemogo v binominativnyx predloženijax', *Izvestija akademii nauk SSSR, Serija literatury i jazyka* 38 (4): 349–60.
- — (1997). 'Binominativnoe predloženie: Problema soglasovanija svjazki', *Oblik slova: Sbornik statej pamjati D. I. Šmeleva*. Moscow: Rossijskaja akademija nauk, 170–82.
- Partee, B. (1986). 'Ambiguous Pseudoclefts with Unambiguous "Be"', in S. Berman, J. W. Choe, and J. McDonough (eds), *Proceedings Of NELS 16*, 354–66.
- (1987). 'Noun Phrase Interpretation and Type-Shifting Principles', in J. Groenendijk, D. De Jong, and M. Stokhof (eds), *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*. Dordrecht: Foris, 115–43.
- (1998). 'Copula Inversion Puzzles in English and Russian', in K. Dziwirek, H. Coats, and C. M. Vakareliyska (eds), *Formal Approaches to Slavic Linguistics: The Seattle Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 361–95.
- Partee, B. and Borshev, V. (2002). 'Genitive of Negation and Scope of Negation in Russian Existential Sentences', in J. Toman (ed.), *Formal Approaches to Slavic Linguistics* 10. Ann Arbor, MI: Michigan Slavic Publications, 181–200.
- — (2004). 'The Semantics of Russian Genitive of Negation: The Nature and Role of Perspectival Structure', in R. Young (ed.), *Proceedings from SALT XIV*. Ithaca, NY: CLC Publications, 212–34.
- Paslawska, A. and Von Stechow, A. (2002). 'Perfect Readings in Russian', <[http://vivaldi.sfs.nphil.uni-tuebingen.de/~arnimo/alexiadourathertstechow/pasl\\_stechow.doc](http://vivaldi.sfs.nphil.uni-tuebingen.de/~arnimo/alexiadourathertstechow/pasl_stechow.doc)>, accessed 1 March, 2006.



- Pauliny, E., Ružička, J., and Štolc, J. (1968). *Slovenská gramatika*. Bratislava: Slovenské pedagogické nakladateľ'stvo.
- Peciar, Š. (ed.), (1959–65). *Slovník slovenského jazyka*. Bratislava: Vydavateľ'stvo Slovenskej akadémie vied.
- Pereltsvaig, A. (2000). 'On Accusative Adverbials in Russian and Finnish', in A. Alexiadou and P. Svenonius (eds), *Adverbs and Adjunction: Linguistics in Potsdam* 6, 155–76.
- (2001). 'On the Nature of Intra-Clausal Relations: A Study of Copular Sentences in Russian and Italian', Doctoral Dissertation. McGill University.
- (2006). 'Small Nominals', *Natural Language And Linguistic Theory* 24 (2): 433–500.
- (forthcoming-a). 'What Does American Russian Tell Us About Language?' *Journal of Slavic Linguistics*.
- (forthcoming-b). 'On the Semantics of Russian Tense and Aspect Morphology', *Journal of Slavic Linguistics*.
- (2007). 'On the Universality of DP: A View from Russian', *Studia Linguistica*, 61(1): 1–36.
- Pesetsky, D. and Torrego, E. (2004). 'The Syntax of Valuation and the Interpretability of Features', <http://web.mit.edu/Linguistics/www/Bibliography/Pesetsky.html>, accessed 1 May 2006.
- Peškovskij, A. M. (1938). *Russkij sintaksis v naučnom osveščenii*. Moscow: Gosudarstvenno učebno-pedagogičeskoe izdatel'stvo.
- Petr, J. et al. (1986–1987). *Mluvnice češtiny*. Prague: Academia.
- Petrukhina, E. (2000). *Aspektual'nye kategorii glagola v russkom jazyke: V sopostavlenii s češkim slovatskim, pol'skim i bolgarskim jazykami*. Moskva: Moskovskij Gosudarstvennyj universitet.
- Petersson, T. (1972). *On Russian Predicates: A Theory of Case and Aspect*. Gothenburg: Slavica Gothoburgensia.
- Potebnja, A. (1888/1958). *Iz zapisok po russkoj grammatike 1–2*. Moscow: Gosudarstvennoe učebno-pedagogičeskoe izdatel'stvo.
- Przepiórkowski, A. (1999). 'Case Assignment and the Complement–Adjunct Dichotomy: A Non-Configurational Constraint-Based Approach', Doctoral Dissertation. Universität Tübingen.
- Pugh, S. M. and Press, I. (1999). *Ukrainian: A Comprehensive Grammar*. London/New York: Routledge.
- Pustejovsky, J. (1992). 'The Syntax of Event Structure', in B. Levin and S. Pinker (eds), *Lexical And Conceptual Semantics*. Amsterdam: Elsevier Science Publishers, 57–82.
- Pylkkänen, L. (2002). 'Introducing Arguments', Doctoral Dissertation. MIT.
- Ramchand, G. (1997). *Aspect And Predication: The Semantics of Argument Structure*. Oxford: Clarendon Press.
- (2004). 'Time And The Event: The Semantics of Russian Prefixes', <<http://www.hum.uit.no/A/Ramchand/Research.html>>, accessed 1 January 2006.
- Rapoport, T. R. (1987). 'Copular, Nominal and Small Clauses: A Study of Israeli Hebrew', Doctoral Dissertation. MIT.

- 
- (1993a). 'Adjunct-Predicate Licensing and D-Structure', *Syntax and Semantics* 25: 159–87.
- (1993b). 'Verbs in Depictives and Resultatives', in J. Pustejovsky (ed.), *Semantics and the Lexicon*. Dordrecht, London: Kluwer, 163–84.
- (1999). 'Structure, Aspect, and the Predicate', *Language* 3–4: 653–77.
- Rappaport, G. (1984). *Grammatical Function and Syntactic Structure: The Adverbial Participle of Russian*. Columbus, OH: Slavica.
- Rassudova, O. P. (1968). *Upotreblenie vidov glagola v russkom jazyke*. Moscow: Izdatel'stvo Moskovskogo gosudarstvennogo universiteta.
- (1984). *Aspectual Usage in Modern Russian*. Moscow: Russkij Jazyk.
- Reichenbach, H. (1947). *Elements of Symbolic Logic*. New York: Macmillan.
- Reinhart, T. (1996). 'Syntactic Effects of Lexical Operations: Reflexives and Unaccusatives', *OTS Working Papers In Linguistics*, [http://www.tau.ac.il/~reinhart/ling\\_dl/Lexic\\_96.doc](http://www.tau.ac.il/~reinhart/ling_dl/Lexic_96.doc), accessed 1 January 2006.
- and Siloni, T. (2004). 'Against an Unaccusative Analysis of Reflexives', in A. Alexiadou, E. Anagnostopoulou, and M. Everaert (eds), *The Unaccusativity Puzzle*. Oxford: Oxford University Press, 159–80.
- Reuland, E. (1983). 'Governing -Ing', *Linguistic Inquiry* 14: 101–36.
- Richards, M. (2005). 'Defectiveness and Definiteness: The Role of v-Def in the Russian Genitive of Negation', Paper Given at BASEES.
- Richards, N. (2001). *Movement In Language: Interactions And Architectures*. Oxford: Oxford University Press.
- (2002). 'A Distinctness Constraint On Linearization', <<http://web.mit.edu/Norvin/www/Papers/Distinctness.pdf>>, accessed 1st October, 2003.
- Richardson, K. (2001a). 'Small Clauses in Russian', *MIT Working Papers In Linguistics* 40: 217–30.
- (2001b). 'What Secondary Predicates in Russian Tell us About the Link Between Tense, Aspect and Case', *ZAS Papers In Linguistics* 26, <http://www.zas.gwz-berlin.de/Papers/Zaspil/Articles/ZASPIL26Ric.pdf>.
- (2003a). 'The Case for Meaningful Case: The Interaction of Tense, Aspect, and Case in Russian', Doctoral Dissertation. Harvard University.
- (2003b). 'Developing the Case for Meaningful Case: The Link Between Event Structure and Case in Russian', *Formal Approaches to Slavic Linguistics* 11: 451–68.
- (2006). 'Case and Aspect in Ukrainian Depictives', *Harvard Ukrainian Studies* 28: *Festschrift For Michael Flier*. Cambridge, MA: Harvard Ukrainian Research Institute.
- Ritter, E. and Rosen, S. T. (2000). 'Event Structure and Ergativity', in C. Tenny and J. Pustejovsky (eds), *Events as Grammatical Objects*. Stanford: CSLI, 187–238.
- Rivero, M. L. and Sheppard, M. M. (2002). 'On Impersonal *se/si* in Slavic', in G. Zybatow et al. (eds), *Current Issues in Formal Slavic Linguistics*. Frankfurt am Main: Peter Lang, 137–47.
- (2003). 'Indefinite Reflexive Clitics In Slavic: Polish And Slovenian', *Natural Language And Linguistic Theory* 21: 89–155.

- Roberts, I. (1988). 'Predicative APs', *Linguistic Inquiry* 19 (4): 703–10.
- Roeper, T. and De Villiers, J. (1992). 'Ordered Parameters in the Acquisition of WH-Questions', in J. Weissenborn and H. Goodluck (eds), *Theoretical Issues in Language Acquisition*. Hillsdale: Lawrence Erlbaum Associates, 191–236.
- Rosen, S. T. (1996). 'Events and Verb Classification', *Linguistics* 34: 191–223.
- (1999). 'The Syntactic Representation of Linguistic Events', *Glott International* 4 (2): 3–11.
- Rothstein, S. (1983). 'The Syntactic Forms of Predication', Doctoral Dissertation. MIT.
- (1985). 'The Syntactic Forms of Predication', *Linguistic Review* 5: 163–72.
- (1992). 'Predication and the Structure of Clauses', *Belgian Journal Of Linguistics* 7: 153–69.
- (2001). *Predicates and their Subjects*. Dordrecht: Kluwer.
- (2003). 'Secondary Predication and Aspectual Structure', in E. Lang et al. (eds), *Modifying Adjuncts*. Berlin/New York: Mouton De Gruyter, 553–90.
- (2004). *Structuring Events: A Study in the Semantics of Lexical Aspect*. Oxford: Blackwell.
- Rudin, C. (1988). 'On Multiple Questions and Multiple Wh-Fronting', *Natural Language and Linguistic Theory* 6: 445–501.
- Rusanovskij, V. M. et al. (1986). *Ukrainskaja grammatika*. Kiev: Naukova dumka.
- Russell, B. (1919). *The Philosophy of Mathematics*. London: Allen and Unwin.
- Sawicki, L. (1988). *Verb-Valency in Contemporary Polish: A Study of the Major Valency-Types*. Tübingen: Gunter Narr Verlag.
- Schachter, P. (1976). 'A Nontransformational Account of Gerundive Nominals in English', *Linguistic Inquiry* 7: 205–41.
- Schein, B. (1995). 'Small Clauses and Predication', *Syntax and Semantics* 28: 49–76.
- Schoorlemmer, M. (1991). (1995). *Participial Passive and Aspect In Russian*. Utrecht: OTS Dissertation Series, Utrecht University.
- (1997). 'The Role of the Internal Argument in the Russian Aspectual System', in U. Junghanns and G. Zybatow (eds), *Formale Slavistik*. Frankfurt Am Main: Vervuert, 229–38.
- (2004). 'Syntactic Unaccusativity in Russian', in A. Alexiadou, E. Anagnostopoulou, and M. Everaert (eds), *The Unaccusativity Puzzle*. Oxford: Oxford University Press, 207–42.
- Schütze, C. (2001). 'On the Nature of Default Case', *Syntax* 4: 205–38.
- Seliverstova, O. N. (1982). *Semantičeskie tipy predikatov*. Moscow: Nauka.
- Shevelov, G. (1963). *The Syntax of Modern Literary Ukrainian: The Simple Sentence*. Slavistic Printings And Reprintings 38. The Hague: Mouton & Co.
- (1993). 'Ukrainian', in B. Comrie and G. Corbett (eds), *The Slavonic Languages*. London: Routledge, 947–98.
- Smith, C. (1991/1997). *The Parameter Of Aspect*. Dordrecht: Kluwer.
- Sørensen, H. (1957). *Studies on Case in Russian*. Copenhagen: Kommission Hos Rosenkilde Og Bagger.

- Spencer, A. and Zaretskaya, M. (1998). 'Verb Prefixation in Russian as Lexical Subordination', *Linguistics* 36: 1–39.
- Sreznevskij, I. I. (1903). *Materialy dlja slovarja drevne-russkago jazyka*. Saint Petersburg: Imp. akademija nauk.
- Stevanović, M. (1974). *Savremeni Srpskohrvatski jezik*. Belgrade: Naučna knjiga.
- (1989). *Savremeni srpskohrvatski jezik*. Belgrade: Naučna knjiga.
- Stowell, T. (1978). 'What Was There Before There Was There', *Proceedings Of the Chicago Linguistics Society* 14: 458–71.
- (1981). 'Origins of Phrase Structure', Doctoral Dissertation. MIT.
- (1982). 'The Tense of Infinitives', *Linguistic Inquiry* 13: 561–70.
- (1983). 'Subjects across Categories', *The Linguistic Review* 2: 285–312.
- Stump, G. (1985). *The Semantic Variability of Absolute Constructions*. Dordrecht: Reidel.
- Švedova, N. et al. (1980). *Russkaja grammatika*. Moscow: Akademija nauk SSSR.
- Svenonius, P. (2001). 'Case and Event Structure', *ZAS Papers In Linguistics* 26: *The Syntax Of Predication*. <<http://www.zas.gwz-berlin.de/papers/zaspil/articles/ZAS-PIL26 Sve.pdf>>, accessed 1 January 2002.
- (2004). 'Slavic Prefixes Inside and Outside the VP', *Nordlyd* 32 (2): 205–53.
- (forthcoming). 'Russian Prefixes are Phrasal', *Formal Descriptions of Slavic Languages* 5.
- Swan, O. (1980). *A Concise Grammar of Polish*. London: Orbis.
- Takezawa, K. (1993). 'Secondary Predication and Locative/Goal Phrases', in N. Hasegawa (ed.), *Japanese Syntax in Comparative Grammar*. Tokyo: Kurosio, 45–77.
- Tatsuya, S. (1988). 'The Structure Of English Gerunds', Doctoral Dissertation. University Of Washington.
- Tenny, C. (1994). *Aspectual Roles and the Syntax–Semantics Interface*. Dordrecht: Kluwer.
- Thelin, N. (1990). 'On the Concept of Time: A Prolegomena to a Theory of Aspect and Tense in Narrative Discourse', in N. Thelin (ed.), *Verbal Aspect in Discourse*. Amsterdam: John Benjamins, 91–129.
- Thráinsson, H. (1996). 'On the (Non-)Universality of Functional Categories', in W. Abraham et al. (eds), *Minimal Ideas: Syntactic Studies in the Minimalist Framework*. Amsterdam/Philadelphia: John Benjamins, 253–81.
- Timberlake, A. (1975). 'Hierarchies in the Genitive of Negation', *Slavic and East European Journal* 19: 123–38.
- (1982). 'Invariance and the Syntax of Russian Aspect', in P. J. Hopper (ed.), *Tense–Aspect: Between Semantics and Pragmatics*. Amsterdam: John Benjamins, 305–31.
- (1985). 'Temporal Schemata of Predicates', in M. S. Flier and R. D. Brecht (eds), *Issues in Russian Morphosyntax*. Columbus, OH: Slavica, 35–57.
- Timberlake, A. (1986). 'The Semantics of Case in Russian Predicate Complements', *Russian Linguistics* 10: 137–65.
- (2003). *A Reference Grammar of Russian*. Cambridge: Cambridge University Press.
- Torrego, E. (1998). *The Dependencies Of Objects*. Cambridge, MA: MIT Press.
- Townsend, C. (1967). 'Voice and Verbs in -sja', *Slavic and East European Journal* 6 (2): 196–203.

- Travis, L. (1992). 'Inner Aspect and the Structure of VP', *Cahiers de linguistique de l'UQAM* 1 (1): 130–46.
- (1994). 'Event Phrase and a Theory of Functional Categories', in P. Koskinen (ed.), *Proceedings of the 1994 Annual Conference of the Canadian Linguistic Association: Toronto Working Papers In Linguistics*, 559–570.
- (2000). 'Event Structure in Syntax', in C. Tenny and J. Pustejovsky (eds), *Events as Grammatical Objects*. Stanford: CSLI, 145–86.
- Ueda, M. (1992). *The Interaction Between Clause-Level Parameters and Context in Russian Morphosyntax: Genitive of Negation and Predicate Adjectives*. Munich: Verlag Otto Sagner.
- Van Der Leek, F. and Jong, J. (1982). 'The Complement Structure of Perception Verbs in English', *Linguistics in the Netherlands* 13: 103–14.
- Van Hout, A. (2007). 'Acquiring Telicity Crosslinguistically: On the Acquisition of Telicity Entailments Associated with Transitivity', in M. Bowerman and P. Brown (eds), *Crosslinguistic Perspectives on Argument Structure: Implications for Learnability*. Hillsdale: Lawrence Erlbaum.
- Van Schooneveld, C. (1978). *Semantic Transmutations: Prolegomena to a Calculus of Meaning: The Cardinal Semantic Structure of Prepositions, Cases, and Paratactic Conjunctions in Contemporary Standard Russian*. Bloomington, IN: Phylssardt.
- (1986). 'Jakobson's Case System and Syntax', in R. D. Brecht and J. D. Levine (eds), *Case in Slavic*. Columbus, OH: Slavica, 373–85.
- Van Valin, R. D., Jr. (2005). *Exploring the Syntax–Semantic Interface*. Cambridge/New York: Cambridge University Press.
- Van Voorst, J. (1988). *Event Structure*. Amsterdam/Philadelphia: John Benjamins.
- Vendler, Z. (1957). 'Verbs and Times', *The Philosophical Review* 66: 143–60.
- Verkuyl, H. (1972). *On the Compositional Nature of the Aspects*. Dordrecht: Reidel.
- (1993). *A Theory of Aspectuality: The Interaction Between Temporal and Atemporal Structure*. Cambridge: Cambridge University Press.
- Vinogradov, V. V. (1960). *Grammatika russkogo jazyk: sintaksis*. Moscow: Akademija nauk.
- (1982). *Očerki po istorii russkogo literaturnogo jazyka XVII-XIX Vekov*. Moscow: Vyšaja škola.
- Vyxovanec, I. R. (1987). *Sistema vidminkiv ukrajins'koji movy*. Kiev: Naukova dumka.
- Wieczorek, D. (1994). *Ukrainskij pierfekt na -NO, -TO na fonie polskiego pierfiekta*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Wierzbicka, A. (1980). *The Case for Surface Case*. Ann Arbor, MI: Karoma.
- (1986). 'The Meaning of a Case: A Study of the Polish Dative', in R. D. Brecht and J. D. Levine (eds), *Case in Slavic*. Columbus, OH: Slavica, 386–426.
- Williams, E. (1975). 'Small Clauses in English', *Syntax and Semantics* 4: 249–73.
- (1980). 'Predication', *Linguistic Inquiry* 11: 203–37.
- (1983a). 'Against Small Clauses', *Linguistic Inquiry* 14: 287–308.
- (1983b). 'Semantic Versus Syntactic Categories', *Linguistics And Philosophy* 6: 423–46.
- Winkler, S. (1997). *Focus and Secondary Predication*. Berlin: Mouton De Gruyter.

- Woolford, E. (2006). 'Lexical Case, Inherent Case, and Argument Structure', *Linguistic Inquiry* 37 (1): 111–30.
- Wunderlich, D. (1997). 'Cause and the Structure of Verbs', *Linguistic Inquiry* 28: 27–68.
- Wurmbrand, S. (2006). 'Infinitives: A Future Without Tense'. Talk Given At The Jersey Syntax Circle, Princeton. <<http://wurmbrand.uconn.edu/Susi/Papers%20and%20handouts.html>>, accessed 1 January 2006.
- (2007). 'Infinitives are Tenseless', *30th Annual Penn Linguistics Colloquium. Penn Working Papers in Linguistics*, 13 (1).
- Yip, M., Maling, J., and Jackendoff, R. (1987). 'Case in Tiers', *Language* 63: 217–50.
- Zaenen, A., Maling, J., and Thráinsson, H. (1985). 'Case and Grammatical Functions: The Icelandic Passive', *Natural Language and Linguistic Theory* 3: 441–83.
- Zaliznjak, A. A. (1977). *Grammatičeskij slovar' russkogo jazyka*. Moscow: Russkij jazyk.
- (1980). *Grammatičeskij slovar' russkogo jazyka*. Moscow: Russkij jazyk.
- Zamparelli, R. (2000). *Layers in the Determiner Phrase*. New York: Garland.
- Zaring, L. (1996). 'Two "Be" Or Not Two "Be": Identity, Predication and the Welsh Copula', *Linguistics and Philosophy* 19: 103–14.
- Zoerner, E. C. (1995). 'Coordination: The Syntax of &P', Doctoral Dissertation. University of California, Irvine.
- Zucchi, A. and White, M. (2001). 'Twigs, Sequences and the Temporal Constitution of Predicates', *Linguistics and Philosophy* 24: 223–70.

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